THE U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

convenes

WORKING GROUP

ADVISORY BOARD ON

RADIATION AND WORKER HEALTH

PROCEDURES REVIEW

The verbatim transcript of the Working Group Meeting of the Advisory Board on Radiation and Worker Health held telephonically on Nov. 7, 2007.

STEVEN RAY GREEN AND ASSOCIATES
NATIONALLY CERTIFIED COURT REPORTERS
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C O N T E N T S

Nov. 7, 2007

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P A R T I C I P A N T S

(By Group, in Alphabetical Order)

BOARD MEMBERS

CHAIR
ZIEMER, Paul L., Ph.D.
Professor Emeritus
School of Health Sciences
Purdue University
Lafayette, Indiana

EXECUTIVE SECRETARY
WADE, Lewis, Ph.D.
Senior Science Advisor
National Institute for Occupational Safety and Health
Centers for Disease Control and Prevention
Washington, DC

MEMBERSHIP

GIBSON, Michael H.
President
Paper, Allied-Industrial, Chemical, and Energy Union
Local 5-4200
Miamisburg, Ohio

GRIFFON, Mark A.
President
Creative Pollution Solutions, Inc.
Salem, New Hampshire

MUNN, Wanda I.
Senior Nuclear Engineer (Retired)
Richland, Washington

IDENTIFIED PARTICIPANTS

ANIGSTEIN, BOB, SC&A
BEHLING, HANS, SC&A
BEHLING, KATHY, SC&A
BRACKETT, LIZ, ORAU
CHANG, CHIA-CHIA, NIOSH
ELLIOTT, LARRY, NIOSH
HINNEFELD, STUART, NIOSH
HOMOKI-TITUS, LIZ, HHS
HOWELL, EMILY, HHS
KOTSCH, JEFF, DOL
MAURO, JOHN, SC&A
OSTROW, STEVE, SC&A
SIEBERT, STEVE, ORAU
SMITH, MATTHEW, ORAU
THOMAS, ELYSE, ORAU

P R O C E E D I N G S

NOV. 7, 2007

(10:00 a.m.)

OPENING REMARKS

DR. WADE: This is the work group on Procedures of the Advisory Board chaired by Ms. Munn, members Gibson, Griffon, Ziemer, Robert Presley is an alternate. I've identified that Munn, Gibson and Ziemer are on the call. Is Mark Griffon with us?

(no response)

DR. WADE: Robert Presley?

(no response)

DR. WADE: Are there any other Board members on the call other than those identified as members or alternates to the work group?

(no response)

DR. WADE: Okay, so we have three members of the work group. There are four regular members, and that's fine. We don't have a quorum of the Board. What I would do is ask that we do some introductions so that we all know, particularly the principals. And let's start with members of NIOSH or the ORAU extended team who are on the call,

participating actively on the call.

Again, this is Lew Wade. I work for the NIOSH Director, and I serve as the DFO for the Advisory Board.

MR. ELLIOTT: This is Larry Elliott. I serve as the Director for the Office of Compensation Analysis and Support.

MR. HINNEFELD: This is Stu Hinnefeld, Technical Program Manager for OCAS in Cincinnati.

DR. WADE: Other NIOSH/ORAU team members?

MS. THOMAS: This is Elyse Thomas with the O-R-A-U team.

DR. WADE: Welcome, Elyse.

MR. SMITH: Matt Smith, the ORAU team.

DR. WADE: Welcome.

MR. SIEBERT: Scott Siebert, ORAU team.

DR. WADE: Welcome.

Other NIOSH or ORAU?

(no response)

DR. WADE: How about SC&A team?

DR. MAURO: Yes, this is John Mauro from the SC&A team.

MS. BEHLING: Kathy Behling of SC&A.

DR. BEHLING: Hans Behling, SC&A.

DR. ANIGSTEIN: Bob Anigstein, SC&A.

DR. WADE: Other members of the SC&A team?

(no response)

DR. WADE: Are there other federal employees who are working on this call?

MS. HOMOKI-TITUS: This is Liz Homoki-Titus with HHS.

MS. CHANG: This is Chia-Chia Chang with NIOSH. I did not get Wanda's agenda. Could someone e-mail that to me, please?

MR. ELLIOTT: I'll send it to you, Chia-Chia, Larry.

MS. HOMOKI-TITUS: Hey, Larry, I didn't get it either, and I assume that Emily probably didn't. Can you include us on that e-mail?

MR. ELLIOTT: Will do.

MS. HOMOKI-TITUS: Thanks.

DR. WADE: Okay, beyond Chia-Chia, any other feds on the line?

MS. HOMOKI-TITUS: Lew, Emily Howell should be joining us in a few minutes.

DR. WADE: Thank you.

MR. KOTSCH: Jeff Kotsch is here with Labor.

DR. WADE: Jeff, as always, welcome, thank you for joining us.

Other feds?

Are there workers, petitioners, representatives of members of Congress or anyone else who would like to be identified for the record as being on this call?

(no response)

DR. WADE: Any others who'd like to be identified?

(no response)

DR. WADE: One last caution about etiquette. We're doing real well. We had a rough call last week I believe it was so again, if at all possible, mute the instrument that you're using if you're not speaking, obviously. Try and use a handset when you speak although we do understand Wanda's special circumstances, the Chair.

But again, for the rest of us try and use a handset if at all possible and be very aware of background noises. Last week we had someone who had put the phone on hold and then the background music would play, and it's impossible to conduct business. So think about those things as you do business.

As I had mentioned to the work group

Chair, I'll have to leave this call in a half an hour or so, and I'll identify when I do. Chia-Chia Chang will serve as designated federal official and Emily and Liz are on the call to deal with any legal issues. If I have to be reached, Chia-Chia has a number to reach me. So, Wanda, please begin.

MR. GRIFFON: Hey, Wanda and Lew, this is Mark Griffon. I joined after you were already in the middle of introductions.

DR. WADE: Good, Mark, thank you, now the work group is whole.

MS. MUNN: Mark, did you get the agenda all right?

MR. GRIFFON: Yeah, I did. Thank you, Wanda.

MS. MUNN: And Liz and Emily, I should be including you as a standard thing on the distribution. I guess I haven't been doing that. If one of you would send me at your convenience telling me which or both of you you would like to have notified when I send these things out, I'll include you in a standard mailing.

MS. HOMOKI-TITUS: Okay, that would be

great. We'll provide you with our e-mail addresses.

MATRIX CONSTRUCTION

MS. MUNN: Now then we are hoping that all of the members of our work group have in their hands a copy of the format, the suggested format that our subgroup worked with Kathy on putting together earlier in the week. Do you all have that?

(Members replied affirmatively.)

MS. MUNN: Good, I sent it out and hoped you'd have an opportunity by now to take a look at it. I think what the subgroup tried to do was to capture all of the issues that we had discussed in full work group sessions while we were in Naperville. Kathy very helpfully put this all together for us and after some suggestions that she got back from us, provided us with this sample of what the entire package would look like.

As you probably are aware just from thinking about it, issues tracking matrix for the Procedures review is going to be a bulky document. So I hope that as we seek resolution on something, that page will drop

out of our active group and go into what would be an archival that we've done. But the issues tracking system, the one-liner, would in my view continue to accumulate as we go along.

Kathy, was that your thinking? Am I correctly having what you had in mind when you put this together?

MS. BEHLING: Well, I'm going to defer that question to John. He has made up this more complex matrix initially, and I'm not sure if he thought that these longer one-page matrices would go away at some point in time. But I believe that was the thought, that once an issue has been resolved it would be something that would be archived. But we would still be able to track it through the table up front, the one-liners, to let us know that, yes, this item has been closed.

Am I correct there, John?

DR. MAURO: Yeah, in fact, I guess where we are right now in our thinking is that the one-liners won't be always complete. In fact, as I understand it, direction from the previous work group meeting, the one-liners would

contain all, the first set, the second set and the recently issued third set. So in one place there would be one line assigned to each finding associated with every procedure ever reviewed collectively on the project. And that would be, stand as a living document.

It would probably be on the order of ten or 12 pages. I think it's about seven pages right now and contains many or hundreds of findings. But they would all be there so that one could quickly go down the one-liners and see which ones are open, which ones are closed, which ones have been transferred. So, yeah, we did not anticipate that would be archived. That would always be complete.

Now with regard to the more extensive sheets, the one where you have all the dates, the tracking, which I will eventually get into, we could either way. Namely, we could keep, right now I guess my thought was we would keep them, the set, like for example the set you have right now before you that we prepared originally, and now, of course, we've been revising. The idea was that that would be coupled back to one of the three-ring

binder reports.

In other words, there would be, there's a three-ring binder for set one. There's a three-ring binder for set two, and now recently you received a three-ring binder for set three. And that the question we could ask you I guess really now I'll punt back, right now the thought was that we'd have a complete thick package for, a separate one for the first set, a separate one for the second set, and a separate one for the third set. However, if you would like, we could integrate that just like we're integrating the one-liners.

And also if you would like, as issues or findings are closed or transferred -- this is your call, of course, closed would be more appropriate -- we could pull that from the big, thick package or not. I mean, that's really, so we would have one which we would call our working package which would only contain open and active findings. But behind that, of course, in the archives there would be a complete package which would have everything in it. So we're available to do it

whatever way you folks would like.

DR. ZIEMER: Wanda, this is Ziemer. I'd like to make a suggestion on that. I think John's suggestion that we have an open working set of papers is more practical. I don't think we want a new copy every time of closed items and all those pages. Once an item is closed, I'd like to see it archived. We could all have the binders or whatever with the closed items in it.

But I don't think every time we meet, we're going to want to have a new copy of those closed items. It would seem to me that just the open items, we would have the packet of the open items which are ones which are changing each time we meet. Once they're closed it seems to me it makes, there's no reason to get a fresh copy of the closed items every time.

MS. MUNN: I agree.

Other feelings about that?

MR. ELLIOTT: Yeah, I agree with that.

MS. MUNN: My only variance with John's vision is a small one. I'd envisioned first of all binders with the original findings in

them which we probably will read at the time that they come to us and more than likely will not refer to very often after that. But that whole point in this matrix is to capture the essence of the findings, all of them. There would be, once issued and separated into the matrix, they would become a part of the archive itself. My vision would be that our active list, our active package, would include, would be both the one-liners and the individual pages for the open ^.

DR. ZIEMER: Yeah, this is Ziemer. I agree with that. I think that makes sense to have the, the summary should have everything on it as John described it, but as far as the detail, the working package would be the open items.

MS. MUNN: If we, other people plan to do this individually, but my thinking was I would put together a gigantic three-ring binder with those two items in it. And as we close items, I would remove that sheet and place it in the archives as a closed item that would show on our one-liner but not elsewhere. So that's my personal view of how I expect to juggle that.

Anyone else?

DR. ZIEMER: Well, this is Ziemer again. I just want to ask. You had a working group of the working group last week, and what was their sort of overall conclusion on the sample tracking matrix that John provided or Kathy provided?

MS. MUNN: We were pretty much of a mind in the framework of what I've just given you without that just one or two twitches, we may need some minor revisions of one sort or another. But that primary change that we made, the original draft that was provided to us for our -- was to make sure that dates were added to all of these activities so that we could track the procedures that we're looking at alphabetically.

And it gets confusing jumping back and forth from the first group to the second group to the third group. There's no rhyme or reason to the order in which these things could be coming to us before. Suggested that the order be alphabetized, that we add the date column so that it's easy to find the item alphabetically. There's the one-liner or the

complex.

DR. MAURO: Wanda, this is John. I have a point of clarification regarding what you just stated. When we compile these lists, whether they're the one-liners or the more complete documents, you had mentioned alphabetical. When we last spoke it was my understanding that they would be first grouped of whether they were OTIBs or OCAS documents.

In other words, O-R-A-U-T documents or OCAS documents. And then within that grouping they would be grouped according to their number, namely, the lowest number first, you know, OTIB-0001, OTIB-0002, OTIB-0003 would be the order in which they would appear under the category called OCAS as opposed to alphabetical. We certainly could do it alphabetical according to title, but when we last spoke I did get the impression that we were leaning more toward numerical sequencing.

MS. MUNN: Numerical sequencing after they have been sorted by their alphanumeric. The order in which Kathy provided the one-liners is exactly what I had in mind.

DR. MAURO: Okay.

DR. ZIEMER: Could you clarify -- this is Ziemer again -- so they would be sorted first as to whether they're an OCAS or an OTIB or whatever and then by number?

MS. MUNN: It would be sorted as to whether they were OCAS or ORAUT and then by number.

DR. ZIEMER: Yes, okay, thank you.

DR. MAURO: Okay, good. When you said alphabetical I was thrown a bit by that. I wasn't quite sure what you were referring to.

MS. MUNN: Well, to me, in my mind that's alphabetized.

DR. ZIEMER: Is the sample matrix that was sent out and dated modified on the seventh of November? Is that the one that was modified based on the subgroup's review?

MS. MUNN: Working draft and drafts that have the date 11/5/2007 on them.

DR. ZIEMER: Eleven-five.

MS. MUNN: The date that's on the --

DR. ZIEMER: Was on the document itself.

DR. MAURO: Wanda, right now I'm looking at the file that you distributed, the one-liners, and on the bottom as a footer it has a date 11/7/2007.

DR. ZIEMER: Yeah, that's what mine shows, 11/7. I don't see 11/5.

MS. MUNN: That's fine.

DR. ZIEMER: Does that one include the recommendations from the subgroup then?

MS. MUNN: Yes, it does.

DR. ZIEMER: I thought it looked very good. I think it will be extremely helpful in tracking issue resolution on all of these, and I'm hopeful that a similar methodology can be used by some of the other groups as they track issues.

DR. MAURO: Wanda, this is John. There's one other aspect of the question I raised earlier that I don't think we addressed. That is, for the big document that we're going to be tracking, whether it's the subset which is the active ones or the completed archived one which has everything, do you want us to integrate this first set, second set and third set into one master matrix? Or do you want to keep those separate where they key back to the individual deliverable, three-ring binder deliverable?

MS. MUNN: Well, it was my understanding

from the subgroup that it is our desire that all of them be incorporated into a single item. That was one of the reasons why we thought the date was so important; as long as we have the date column there it's easy to identify whether that item came from group one, group two or group three.

DR. MAURO: Very good. No problem.

MS. BEHLING: Wanda, just for one clarification from me. This is Kathy Behling. I assume you're talking about the roll-up table or that summary table; we're going to include all procedures that have been done in that summary table, correct?

MS. MUNN: That's correct.

DR. MAURO: But what I'm hearing is not only does it apply to the one-liner table, it also applies to the big table.

MS. MUNN: Yes, it does. So we want, instead of having little slumps that we can't identify because we think of them in terms of alphanumeric designations and to have to think then whether they are set one, set two or set three is too much of a confusing factor. All of the items on which we're working will go

into one table, both the one-liners and the more complex. It will all be one group, all be organized in the alphanumeric order that we originally discussed. The date will identify for us whether it was from the first set, the second set or the third set.

DR. ZIEMER: Well, in that connection then as I look at the, I guess you'd call it a sample roll up, all of these seem to have the same dates. What's an example of --

MS. BEHLING: This is Kathy Behling, and I can answer that question. The reason these all have the same date is because these were all associated with the second set of procedures that we submitted to the Board. That's why --

DR. ZIEMER: The full table would have a whole other group which would have the earlier date, and then there would be yet another group?

MS. BEHLING: That's correct.

DR. ZIEMER: For example, then, what you're saying, let's take OTIB-0017, there would be perhaps some earlier OTIB-0017 findings, and then these 6/28 findings, and then some later

OTIB-0017 findings?

MS. BEHLING: Right, that's correct.

DR. ZIEMER: Okay, I got you, so they would just be inserted in here.

MS. MUNN: Right, that's how the work group perceived it so that we would at all times be working from a list that would give us all of the findings from any given procedure. The date would key us whether they were group one, group two --

DR. MAURO: And you know what's good about this as you pointed out in, for example, OTIB-0017. If we did go through multiple reviews, let's say the first set and then the second set we reviewed a new version, it would all appear under one-liners --

DR. ZIEMER: Right.

DR. MAURO: -- and in the major document right adjacent to each other. Yeah, that's good.

MS. BEHLING: This is Kathy Behling. The only thing that I want to make mention of here is if we, I wasn't convinced, I wasn't sure that we were going to go back to the first set of procedures that we reviewed and take that

matrix and convert it into this format. And that's fine. I just want to caution everyone that that's going to take quite a bit of effort just because in order to capture what happened in each of the working group meetings, I assume it will mean going back to transcripts, and it will require some effort.

MS. MUNN: I don't think it was the intent of the subgroup that we go to that extensive effort, Kathy. I think it was the intent to simply transfer, to see that those items were placed on the roll up, but as far as the individual pages were concerned, that only information that is on the existing matrix be transferred.

MS. BEHLING: Okay, I misunderstood that. That's fine, okay, thank you.

DR. MAURO: Kathy, what I put together, my first draft of the big matrix for the second set, I had that problem. That is, we did have three working group meetings, and the particular package that I put together for consideration by the working group only picked up from the October 2nd, the previous two are not actually captured. In other words we

don't have any material that goes for the two earlier ones.

So what I did is simply say, listen, we're starting this with the October 2nd working group, and I put a little asterisk next to it saying, listen, keep in mind that the information you're looking here has been captured that was discussed previously, but we didn't break it out by date. Because I didn't go back to the transcripts for the two earlier working group meetings because that would have been a heroic effort.

So I think that maybe the way we can make sure we, when we do this integrated, combined package including the first set, I think we just capture the where it is but not try to resurrect and reconstruct the history according by date of working group. We may want to indicate that there were three or four working group meetings or whatever to get us to the point that we reached.

But to try to flesh out what happened in each working group meeting, that would be quite an effort. And I don't know whether it would really add that much value at this point

in the process.

DR. ZIEMER: So I think we use this going forward.

DR. MAURO: Going forward, exactly, yes.

MS. BEHLING: Okay, very good, thank you for the clarification.

DR. ZIEMER: I mean, what's already been done and particularly items closed, we don't have to go back and reconstruct all that at this point.

MS. MUNN: No, they'll be on the roll up.

DR. ZIEMER: The purpose of the document is really to help us in the resolution process, and going back and reconstructing stuff that occurred a year or two or three ago, it won't help us any I don't think.

MS. MUNN: I agree, and it was not the intent of the subgroup anyway for that extensive archive of what transpired during that step forward.

We're clear where we're going. Do we have any idea how long it might take us to have that matrix in hand? That's the only reason I'm really concerned about that because I have an eye to our next scheduled meeting

which is a face-to-face meeting in Cincinnati on December the 11th, and we're hopeful that a new matrix format might be available for us before that time.

MS. BEHLING: This is Kathy. I'll make an attempt to put the entire matrix together by December 11th.

MS. MUNN: Good, it would be very helpful if we had, if we could begin to work from that new matrix.

MS. BEHLING: Okay, very good.

MS. MUNN: If it's impossible, let us know, but otherwise it would be great if we could have that.

MS. BEHLING: Okay, I will do that.

MS. MUNN: Any other comments with regard to the new matrix format?

DR. MAURO: Wanda, by way of clarification to make sure that we're looking at this the same way, I have in front of me the first page of what's called Sample Number One where we, this is the sample of the new product that we will be putting out. I just want to make sure that we're, in terms of, we understand what the format is and the content is, but there's

also a process issue, and I want to make sure that everyone is on board, especially NIOSH sees it the same way we do.

When you look at this format, you'll notice that there's a, for example, a category underneath working group meeting. Like right now if you folks have it in front of you, you'll see a date called 11/7/2007, and that's today. And we're having a working group meeting. And you'll notice underneath that there is two columns, one called NIOSH/SC&A discussion and one called Work Group Directives.

Now I want to make sure we all see this the same way. What I see this as is that this conversation that we're having right now somehow is going to be captured in that box. After this meeting is over someone, certainly we'll be willing to participate in any way and support any way you like, will need to fill in we had this working group meeting today, 11/7/2007, and right underneath that work group meeting you'll see NIOSH/SC&A Discussion. Some words need to be put in there that says, well, what is it that we

talked about today and the exchange.

And to the right of that you see another box that says Work Group Directives. And I would say that underneath that would be what direction the working group gave either NIOSH or SC&A. For example, just this, what I just heard was SC&A received a directive to go forward with the preparation of this matrix for all three sets of cases and deliver a work product to the working group by the December 11th.

And so I envision that that would go in underneath that category. So I just want to make sure we all see it the same way. That was my interpretation functionally how this would work. And that would occur within a matter of a day or two after this meeting. That is, someone, and myself or Kathy or someone from the -- I'm not quite sure how you'd like to do it. But that will need to be done.

Then you'll notice that the next row down there's something called SC&A Follow-Up Action. Now that, this again, is a point of process clarification. Let's say we were

talking about a particular OTIB in this case. Let's say we're talking about OTIB-0017, and one of the items was that after the meeting, after today's meeting, SC&A gets some directive that would be in the box called Work Group Directives, to do some analysis. Or NIOSH is given some directive to do some analysis. And that analysis has been done.

Now my understanding is that prior to the next working group meeting, SC&A would fill in the box called SC&A Follow-Up Action, and we'd fill that information in which would be done between now and the next working group meeting, and we'd fill it in. Similarly, NIOSH would fill in the information called NIOSH Follow-Up Action and fill in their material so that then we would have our working group meeting and then continue the process.

This is how I'm viewing the mechanics of implementing this table. Does everyone see it the same way?

MS. MUNN: The process is a major one. It's the only part of what we're doing that has bothered me a little bit personally. The

question arises who owns the document. Who has access to the document in terms of what goes on it?

DR. ZIEMER: Well, this is Ziemer. Wanda, I think you're, the Chair's got to be the controller so that you would, I mean, you could ask SC&A to draft something, but it seems to me, for example, whatever the work group directive is you would have to agree that that's what we agreed to, and that would go in that column. Take, for example, the OTIB-0006 which NIOSH, I think at our last meeting there was perhaps a directive or at least NIOSH agreed to make some modifications and Stu now has provided us with the modified -0006 and -0007 and, I think, -0008.

Right, Stu?

(no audible response)

DR. ZIEMER: And there perhaps would have been a directive there, NIOSH will modify those in accordance with the discussion. And the follow up is NIOSH has done this on a certain date and distributed the drafts to the committee or something like that. But it seems to me whatever goes in there you might

ask the contractor to fill that in and then bounce it off of you and make sure that it agrees with your understanding from what we agreed to at the meeting. Someone's got to be the point person on it. It seems to me the Chair has got to be kind of the point person on resolution just like Mark is on the Dose Reconstruction Review.

MS. MUNN: You're probably correct, with much hesitation, but --

DR. ZIEMER: Well, for example, I think it's our document, it's the Board's or the subcommittee's document to assure that the resolution process goes forward, so it's our tool.

MS. MUNN: There's no question about that. The question is whether --

DR. ZIEMER: And again, if the wrong words are in, or if we think NIOSH agreed to something, and they think they agreed to something else or likewise with SC&A, we have to make sure we get the right words. So there would have to be a kind of preliminary completion of those boxes. Maybe at the meeting itself we could agree as to what goes

in there.

MS. MUNN: Well, at the meeting itself --

DR. ZIEMER: The work group meeting.

MS. MUNN: -- that the --

DR. ZIEMER: On each item or each issue.

MS. MUNN: -- I suppose we could make an effort to word that --

DR. ZIEMER: I mean, for example, you have action items from the Naperville meeting. Basically, all of those are what you might call the work group directives that's going in those boxes John described, I think.

DR. MAURO: Yes.

MS. MUNN: That's true.

DR. MAURO: That's what I had in mind that this would have the directives. And --

DR. ZIEMER: Basically those are the action items.

DR. MAURO: Right.

DR. ZIEMER: I mean, we're already doing it. They would just show up in the appropriate box for each item. For example, here I see an action item that says NIOSH will reword OTIB-0019 to better reflect actual procedures. That would be in essence I think the

directive.

MS. MUNN: You're right.

DR. ZIEMER: And I don't think, you know, the word directive sounds like we're, you know, do it whether you want to or not, but as we all know as we go through this process, generally we're reaching a kind of agreement state where the Board says, yes, this is what we think should be done. And NIOSH and SC&A agree that that's the direction that should go on an item. So it's a mutual agreement in most cases at least.

MS. MUNN: I think you're probably correct. The concept of wording that needs to go there we're still discussing it, is a good one from my point of view because not only does it relieve me of the responsibility of wording it or of anyone else wording it. It also assures that it is going to go on the action item which I like.

DR. ZIEMER: Well, I think if we assume that our action items are in essence what the Board directive or work group directives are and once those are in place and NIOSH and SC&A indicate how they will respond or what their

status is like revising language or providing a draft of something or preparing some kind of matrix or whatever it is.

DR. MAURO: Paul, would you prefer us replacing the words Work Group Directives with Work Group Action Items?

MS. MUNN: No, directives is fine because sometimes it's not an action item.

DR. ZIEMER: I think essentially we're, it is a kind of directive in the sense that the contractor is being tasked. We can't task NIOSH, but we can task the contractor.

MS. MUNN: I think the wording is probably fine, John.

DR. MAURO: Okay.

MS. MUNN: It's the process that we're going to have to hash into shape here.

DR. MAURO: I had one related question regarding the box underneath where it says SC&A Follow Up. Now, very often, not very often, but sometimes the follow-up activity either by NIOSH or SC&A is a white paper which could be lengthy, could be four, five, six pages which goes into some depth on the issue. My guess is that if the material that would go

in the box would be perhaps a white paper was issued dated so-and-so, and so that it would very briefly summarize the outcome of that investigation. So there needs to be a link, at least something said --

DR. ZIEMER: You wouldn't put the white paper itself in there, but you --

DR. MAURO: Exactly, exactly, because otherwise it would be too lengthy.

DR. ZIEMER: Yeah, yeah.

MS. MUNN: Might I suggest that we consider the paper itself go into the archive?

DR. ZIEMER: As an attachment.

MS. MUNN: An attachment to the archive.

DR. WADE: Makes sense. Wanda, this is Lew. I'm going to have to leave you now, so I wish you good luck. But if you need me, you can always find me.

MS. MUNN: Thank you, Lew, and is Chia-Chia stepping into your shoes?

DR. WADE: She is indeed.

MS. MUNN: Chia-Chia, may I ask the same thing I've asked of Lew in the past that you assist me in keeping track of the action items?

MS. CHANG: I certainly can.

MS. MUNN: On this call, so that you and I can compare notes afterwards and make sure we're not missing anything.

MS. CHANG: Good idea.

MS. MUNN: Ask you to review what you have at the end of this call.

All right, thank you, Lew.

DR. WADE: Bye-bye.

DR. MAURO: If I may, Wanda, bring up one more item. When I originally worked on the first crude draft of the big table, one of the things that was essential for me to be able to do that was to go back to the minutes, not minutes, the transcript of the October, I think it was the third working group meeting. And Ray was kind enough to forward to me the crude, you know, pre-processed transcript which is extremely important to me. In other words I was able to revisit everything so that when I fleshed out the discussion section, the action item section, et cetera, in the material that I provided, I was able to be faithful to what was said at the meeting as opposed to relying solely on my scribble in my

notebook that I take during these meetings.

And I guess I asked a question to Ray and everyone on the working group is to what degree do you think it would be of value to have available this material relatively shortly after the meeting to make sure that we flesh out this document in a faithful way to the minutes, to the actual transcript of the meeting? Is that something that Ray, I guess, and everyone aboard, do you think that's something that can be done or should be done?

MS. MUNN: This is what I indicated to you by e-mail that I wanted to discuss with you, and it's something I suppose that we can put on the table here if we wish it. There are some concerns here. It doesn't have to do necessarily with our Procedures group so much as it does with other working groups.

DR. ZIEMER: Actually, we've been relying on the designated federal official to help establish priorities because we have multiple work groups and Ray will have a little difficulty if every chairman comes to him and wants theirs right now. So there has to be some priority, you know, what's first in the

queue. We can't ask Ray to determine that for himself.

Each work group chairman probably thinks their stuff's the most important. But I think we're still going to have to rely on the designated federal official to serve as a sort of our clearing house for establishing priorities. And we probably couldn't always guarantee that this set of Procedures would be the one that would come out like right away.

I think it's going to depend on what else is going on. What's urgent in terms of main minutes, and you know, we have members of the public from different sites clamoring for minutes as well. So you have all of those issues that have to be taken into consideration.

I think every effort's going to be made to try to get these transcripts out as quickly as possible, but I don't think, I'm not sure we can always guarantee that, for example, for this work group that we're going to have them out in whatever timeframe we think we need.

MS. MUNN: Probably what we can say is we'll

do the best we can, John.

DR. MAURO: Okay.

DR. ZIEMER: John, you may be asking, well, once they're out there's an additional delay and that's the redaction time. And you may be asking for can you get the minutes unredacted?

DR. MAURO: That's what Ray kind enough sent to me very shortly after the meeting. It was, you could see that it was still in a rough form, and then I just used it for my purposes and then destroyed it.

DR. ZIEMER: I think legally, and Liz or Emily can tell me, but I think the contractor can have unredacted minutes or transcripts. Isn't that correct?

MS. HOMOKI-TITUS: Yeah, federal employees and the contractor on a need-to-know basis can have an unredacted transcript.

DR. ZIEMER: Right, but the issue is still going to be that of when they can actually be made available, to try to get them as soon as we can. I don't know what else we can do at that point, John.

DR. MAURO: That's fine. We've been working with the minutes that I write down and

certainly interfacing with the various other folks involved in the meeting to make sure we capture correctly our marching orders. That's fine.

DR. ZIEMER: Then if we have agreed to action items that should help also.

MS. BEHLING: Wanda, if I can just step back a second and be sure that I understand the process as we've discussed it so far and correct me if I'm wrong. I assume that after working group meeting like today's meeting, possibly somebody like myself will sit down and attempt to, to the best of my knowledge and my notes here, fill in the NIOSH/SC&A discussion box associated with today's meeting.

During the meeting we will attempt to fill in the work group directives as we go through each of these procedures. Thereafter, I can send that to you and so you can give it your blessing. And at that point maybe we can send a copy to NIOSH, and we can have a copy.

And then what I envision thereafter is for the follow-up actions, and this is typically what I do for the Dose

Reconstruction reviews, is once I have completed all follow-up actions for everything that we discussed during our working group meeting, I take this matrix one time, try to fill in everything that I can at that one time, send it to you and NIOSH.

And I believe Stu tries to do the same thing. He really only handles the matrix maybe one time, fills in all of his action items, and then it will go back to you. And at that point we would have a matrix that would be prepared and ready for the next work group meeting which you would send out.

MS. MUNN: That process sounds reasonable to me, Kathy. If it does to the other work group members, that's fine. What I will try to incorporate into my personal process is during the work group as we identify action items, I will try to review them before we get to the end of our call in such a way that you can capture the words. I would anticipate, I think the working group would anticipate being ^.

MS. BEHLING: Okay, very good.

DR. ZIEMER: I agree. That sounds like a

good way to proceed.

MS. MUNN: For instance, right now even though we do not have an open matrix item before us, the action item that I have for the discussion that we've just had is simply SC&A will keep tracking matrix in a new format by December 11th, '07. That would be if we have a matrix on which that goes. That would be the type of thing that would go into the directives box.

DR. ZIEMER: And we can have action items that are outside of the matrix itself.

MS. MUNN: Yes, we will.

DR. ZIEMER: I mean, this is a broader action item.

MS. MUNN: Inevitably we'll do that.

DR. MAURO: I was just thinking that, Paul, mainly right now the way we have formatted both the one-liners and the full matrix really only addresses individual findings related to individual procedures. We are actually right now having what I would call an overarching discussion that has across the board applicability to everything we do. And, of course, the matrix is not designed to capture

this so right now we do not have a vehicle to capture the conversation we're having right now.

MS. MUNN: Do we have, we're still sort of out there with respect to what we started all calling overarching issues as well.

DR. ZIEMER: Well, and in fact, we can think about this, and I don't know that, Wanda, we've got to solve it today, but we may want to have for the work group a kind of action item list where we track action items and their closure outside the matrix. These kind of overarching things, I'm not sure what we'd even call it, but maybe just general action items of the work group or something like that, you know.

MS. MUNN: Well, roll up or a subgroup had discussed a column that has status in the work group process. Under transfers there's always the possibility that we can say transfer to whatever. By that means we can keep track of what has gone to global issues and what has gone to another.

MS. BEHLING: As a matter of fact -- and I don't want to deviate from the discussion that

you're currently having -- but when we get a moment that is one area that I wanted to talk about before we leave the matrix discussion. And that is I've made some changes and these were my own thoughts about what needs to go into the status of the work group process.

And I wanted to discuss those terms with you so that we can be consistent and that we're all in agreement. I'm not sure, I don't want to interrupt the discussion you're currently having though because I believe this overarching issues discussion may be something a little different than the status.

DR. ZIEMER: And maybe something that would apply to all work groups.

MS. MUNN: It certainly does, but it flows into our matrix specifically and very strongly because if we're going to be a hallmark of tracking the progress, then we have to be very ^ as possible without killing anybody in the process.

MS. BEHLING: If you'd like I can take a few minutes and just walk you through the wording that I've put into these five sample matrices, and we can come to maybe some agreement as to

whether these are good words for you or not if that's appropriate at this time.

MS. MUNN: Kathy, feel free to discuss at this time unless someone has other feelings.

DR. MAURO: This is John. I do, I might now could use a little clarification. Right now the conversation we're having including the action items and the general discussion and judgments that are being made regarding these overarching issues, I don't see any place where that could be captured in the format and content of the current matrix.

DR. ZIEMER: No, no, that's why we're --

DR. MAURO: Okay, I just wanted to make sure --

DR. ZIEMER: -- talking about maybe there should be a separate tracking of overarching issues or something.

MS. MUNN: It's been established that anywhere so far as I know in the Board's activity. So as far as what we're looking at here for the PST that we do focus on that, and this is probably the ideal time to do it. Why don't you go on, Kathy?

MS. BEHLING: Okay. If you look at Sample

One, this is, I just selected the OTIB-0023 and the fact that we are currently, we started discussing this on the matrix, and we're currently in the process of attempting to resolve this particular finding. So in the Status box on the very first line all the way to the right I put, open-in progress because during our smaller group meeting, Wanda -- and I think correctly so -- indicated we want to be able to determine what is open.

And if it just says open in this box, that would mean to me that we have not begun discussions on it. However, when it says open-in progress, then obviously we have started discussions. So that's why I made these various different samples. So in other words open itself would indicate that it is a finding we ultimately are going to have to discuss, but we haven't had any discussion on that finding yet. And open-in progress means that we've started some discussions just so we can make a differentiation in the roll up.

If we go on to Sample Two, this is a case where a lot of times, especially with the second set -- in fact, John and I talked about

this before the meeting today -- we had someone with SC&A put together the matrix for us. And this person was very thorough and identified every little item that was discussed in the discussion of the particular OTIB or procedures. However, as we started to resolve these issues we realized that potentially if we resolve item one, that also resolves item two and item three.

So this second issue is indicating that we're in discussion on this issue, but it's going to be resolved under a previous item such as in this case it's going to be addressed under Finding OTIB-0017-03. Initially, John had marked this as transferred which I felt it means it leaves the system here, and I didn't necessarily want to use that word in this circumstance.

And then in Sample Three, this gives you the case where you're actually going to transfer this finding because this OTIB or this TIB-0009 finding that we've identified is one of these global issues. And so I want to indicate here that this is being transferred to our global issues findings. It could also

be, another transfer in my mind would be if we come across a finding that really needs to be addressed under our Task One or site profile review because it's specific to a specific site profile. That's where this would be indicated as a transfer and then in parentheses we would say transferred to site profile review Task One.

And then Sample Three, here again, and this is one that I'm still unsure about how to handle this because this is, again, one of those items I don't want to fall through the cracks. This is an example of a case where we had a finding, and NIOSH agreed with our finding, and the resolution to that finding is they're going to revise their procedure. And so it's closed according to what we're doing here, but somewhere down the road we have to ensure that we do, after the revision comes out, that we do go back to this item.

Now I marked it as closed-revised procedure just so that when we look down through the roll-up table it's going to be something when we see revised procedure that we have to keep in mind still is somewhat of

an open item. And maybe I should not have called it closed here. And so we can have a discussion on that and you can correct my words if you desire.

DR. ZIEMER: Maybe another terminology for those kind of cases is needed. I don't have the words at my fingertips but we might give some thought to how we might designate it in a manner that suggests that it's not really closed but is being handled in a different manner.

MS. BEHLING: Yeah, we may want to come up with better words there, absolutely. But I guess what the goal was is I wanted to be able to, once we look at our roll-up table, our one-liners, you can go down that status column and easily be able to identify this is an item that still needs to be addressed in a revision to a procedure or in something else. And I don't know if it would be a transfer. I'm not sure. I didn't necessarily show it as transferred, but I'll let someone else make that decision.

And then finally, Sample Five, this is actually a case where I put an example in

where SC&A agrees with NIOSH's response. There is no further action that's required. And so the status of this finding is closed. No further action will be necessary.

And so I just wanted to engage the Board in some discussion as to what words you would like to see in there so that we can maintain some consistency as I said so when we look down this roll-up table, it's going to be very easy for us to see where we are in the process and what needs to be picked up in the future for other revisions of procedures.

MS. MUNN: Kathy, I think my personal reaction is that all of the terminology is fine with the exception of Sample Four.

MS. BEHLING: Okay, I agree.

Does anyone have any suggestions as to what would be more appropriate?

MS. MUNN: My suggestion would be in abeyance. We ^ in abeyance. That should be a signal to us that it's closed as far as we're concerned, but something is still hanging on. And not until that something that's hanging on is done do we write closed.

MS. BEHLING: Very good, I agree.

MS. MUNN: That way we don't lose it.

DR. ZIEMER: And actually, and that's fine, and some words you may have to spell out at the front end of the document what, or as a footnote for that column, what the different words mean, in abeyance means this.

MS. BEHLING: Could we do in abeyance-dash-revised procedure or whatever the action might be, and just a very short note to indicate what --

DR. ZIEMER: Type of abeyance it is.

MS. MUNN: Absolutely, yes.

MS. BEHLING: Okay. I think that resolves the status.

MS. MUNN: My only concern still continues to be how we're going to deal with global issues. That is something that in my view is currently in NIOSH. I'm not sure how the agency has figured that they're going to deal with these things.

DR. ZIEMER: Well, the first step, of course, is identifying which ones those are, and I think we're at that point. So then it's a matter of not letting them fall through the cracks.

MS. MUNN: Right, so Kathy, are you happy with where we are?

MS. BEHLING: Yes, I'm fine. I appreciate everyone's input. This resolves some of my questions.

MS. MUNN: If no one has any objections I might ask Stu and Larry where NIOSH is with respect to identification of and what's the tracking process for those global issues that we've already identified.

MR. HINNEFELD: Well, this is Stu. What I can offer is Jim Neton has kind of been keeping track of them, but I don't feel really qualified to comment on them here on the phone call.

MS. MUNN: Could we ask as one of our action items for December 11th, that we have some feedback with respect to such status of the tracking mechanism is intended to be?

MR. HINNEFELD: Okay.

MS. MUNN: This work group probably has some responsibility there, but we haven't had the discussion clarifying where the lines of responsibility are and exactly how we're going to do this.

MR. HINNEFELD: Okay.

MS. MUNN: Then in our face-to-face meeting in December 11th, we'll have information from NIOSH about where we are with the global issues and how the agency perceives this type of tracking should go.

DR. MAURO: Wanda, this is John. Mechanistically, when it comes to transfers, whether it's transferred to the global concerns or transferred to a site profile review, what I'm hearing is that once you designate something as transferred, the concern is to make sure that in fact it has been transferred and captured by some other group. And is that what the issue is here?

Not that it's resolved. In other words the resolution, you know, what I'm hearing is the real concern is, okay, we can say this is being handled under review of the Nevada Test Site site profile or under some generic science issue. But there's a bit of presumption in that in terms of is it in fact captured by these other groups of individuals working the problem.

Is that what you're concerned about?

Or are you more concerned that, not that it's captured, but that in fact somehow the resolution of the issue is fed back to us as a working group or to you as a working group?

MS. MUNN: That's the concern. Once we say it's transferred, then does it actually leave our purview or do we have the responsibility to follow it through to its end and make certain that it is, in fact, captured? I think that's the concern of the whole Board actually. It's not just, it doesn't appear to be just a concern of ours. It's a concern of the Board.

Okay, any other issues with respect to matrix and tracking?

(no response)

ACTION ITEMS

MS. MUNN: Okay, let's move on to the action items listed. The first one is a no starter because obviously this is not a full Board meeting. We can move past the report on PERs' status.

The next item is OTIBs -0006, -0007 and -0008. I believe we all should have that by now.

Stu, do you want to address that for us?

MR. HINNEFELD: I sent, those documents were all revised. This is from the Set One procedure review, these actions from Set One.

MS. MUNN: Right.

MR. HINNEFELD: And I did look at the documents, the revisions, and the revisions are strictly to incorporate the comments from the working group. So there were no other, another action that appears down here in a little bit, but any other revisions were like grammar and spelling. So it was strictly for those comments, so this is not, you know, that's the only change. That was one of the items I was supposed to look at.

MS. MUNN: We did all receive that, correct?

MR. GRIFFON: Yes.

MS. MUNN: Did not receive the...

DR. ZIEMER: Do we need to approve those changes? Or what happens next?

MS. BEHLING: This is Kathy Behling, and actually I'm jumping ahead a little bit, but the first item under the SC&A action items is that we were supposed to review the modified

TIB-0006, -0007 and -0008 if they were considered just documents that were modified due to our previous comments. However, it was decided at the last meeting I believe that if NIOSH would have come back to us and said this is a complete rewrite of that procedure, then we would have awaited you assigning that procedure to SC&A.

However, in this particular case since when Stu sent these out he clearly indicated to us that these were just in response to our findings. So I took it upon myself to go back and thoroughly review our findings and the new procedure, the changes that were made to this revision. And, in fact, I was able to clearly indicate, in fact, I'm going to, that will be included on our new matrix in December.

I was able to state that on the three, there were three findings associated with TIB-0006, two findings associated with TIB-0007, and three findings associated with TIB-0008. And NIOSH did appropriately address all of those findings and did a nice job of updating those procedures to accommodate our initial concerns.

MS. MUNN: Well, we are clear on those three.

MS. BEHLING: Yes.

MS. MUNN: Those can be closed?

MS. BEHLING: They will be closed in the next matrix.

MS. MUNN: Excellent.

DR. MAURO: This is John. I've got a, again, this is again mechanistically. So when we issue the December 11th version of our matrix, the one-liners and the full matrix, we, I guess, would prior to the meeting not only fill in the appropriate material for SC&A and NIOSH would fill in their material, but it would also be an attempt, as we just did just now, to go actually get to the point where we fill in that upper right-hand corner regarding closure. And we would do that all prior to the December 11th meeting.

MS. MUNN: Yes.

DR. MAURO: Okay, good, because this makes it very clear --

DR. ZIEMER: Right, and that's the point at which we would take action then having in essence a written recommendation. I mean, we

have the documents. I have laid them side-by-side, well, I think all of them we didn't have the earlier versions there. I guess I'll have to go back and get it, but the other two are laid side-by-side and the actual changes are fairly minimal. They're very specific, and as Kathy described in response to those findings.

MS. BEHLING: That's correct.

DR. ZIEMER: But we will have a formal recommendation in the matrix for the next meeting then is what you're saying.

MS. BEHLING: Yes, I plan to put something in there as probably a SC&A follow-up action item indicating that we did review these procedures. And we were able to verify that the finding was resolved based on the revisions. And that will be specified in the roll-up matrix and in the individual matrix for that, for each of the, in other words for TIB-0006 as I said there were three findings, and there'll be three separate sheets that identify Finding 01, 02 and 03. What those findings were. How NIOSH responded to those in the revision, and whether we thought that that was an appropriate response. Now I don't

know if the Board still needs to approve that or not.

MS. MUNN: I don't believe so. I think if both NIOSH and the contractor have agreed that the issue's erased, has been resolved, then they are resolved.

DR. MAURO: I guess I assume then, then we pass this by you, Wanda, and then you would issue this new matrix just prior to the December 11th working group meeting.

MS. MUNN: Right.

DR. MAURO: And that would be, in effect, the working group's position as of that date of that meeting.

MS. MUNN: That's correct.

DR. MAURO: Very good. This is very clean now. I like this.

MS. MUNN: And if there's any concern that remains with other Board members, they can address it at the time we have our Board meeting. They will have access to it.

DR. MAURO: Beautiful.

MS. MUNN: Excellent.

DR. ZIEMER: Could I ask one clarification for OTIB-0008? Maybe Stu can help me. Was

there an earlier version of OTIB-0008?

MR. HINNEFELD: Yes, an OCAS, it's an OCAS TIB.

DR. ZIEMER: Or OCAS TIB-0008.

MR. HINNEFELD: There was. I think I can --

DR. ZIEMER: This is called Revision Zero.

MS. BEHLING: Excuse me, this is Kathy. I think what Stu sent to us was both the older revision, the original that we were working from and then the revised document. He had both of them in there, Dr. Ziemer, because the original OCAS TIB-008 was Rev. Zero Zero, and that was published I believe on September 29th, 2003.

DR. ZIEMER: Oh, okay.

MS. BEHLING: Okay? And so let me look here. What I printed out --

DR. ZIEMER: What I got from Stu didn't have an earlier version, and since it said it was Rev. Zero, I wasn't clear whether this was a new --

MS. BEHLING: Okay.

DR. ZIEMER: -- in fact, under the description it says it's the new document to provide guidance and use of ICRP 66, but it

does replace a --

MS. BEHLING: What I'm looking at -- and Stu, correct me -- but what Stu sent is Rev. One, and it indicates that it supercedes Rev. Zero. And the date on this is 10/4/2007.

DR. ZIEMER: Maybe I missed --

MS. BEHLING: We can resend that to you.

DR. ZIEMER: What I was looking at was actually the earlier version. I guess I didn't see the later one. I'll go back to the e-mail. I only downloaded five things from that e-mail. There must have been a sixth one.

MR. HINNEFELD: If you can tell me, if someone can tell me what date I sent that out, I'm looking for it here in my sent e-mail. I could look and see what I had attached to it.

MS. MUNN: I think the fifth.

MR. HINNEFELD: The fifth?

DR. ZIEMER: I'm going back in mine, too, and looking to see what I had on that. I think it was sent out on the 15th of October.

MS. BEHLING: Yes, it is the 15th.

DR. ZIEMER: Oh, I found it now. Yeah, there was another one attached, and it got

covered up. You had so many attachments you had to actually scroll through them, and I didn't see that. I found it now. It's not a problem.

MS. MUNN: Okay, we're all okay on ICRP-66?

DR. ZIEMER: Right.

MS. MUNN: If that's the case, we can move on from that action item to the next one. There is, as you all know, a great deal of interest with respect to PROC-92. As matter of fact, I had an inquiry from the media on that earlier this week, and I told them that we would only address the status today, try to identify where we were, that it's coming along all right, for the responses that were made. I said that sometime this month, but we would not have --

MR. HINNEFELD: We expect to have our response in the hands of the work group and SC&A probably by early next week.

MS. MUNN: That's great, because we will have that fairly high on our ^ in Cincinnati. We look forward to receiving it.

Anyone have any other questions?

MR. ELLIOTT: This is Larry Elliott. Just

wanted to elaborate a little bit on what Stu offered there. We are preparing a detailed written response, and I think this will go out under a cover letter that I will sign. I will address it to you as the Chair, Wanda, of this working group and Dr. Ziemer as Chair of the Board. And you can handle it as you see fit from that, from those perspectives. But we will be providing detailed reaction on that to this review.

MS. MUNN: Excellent, I'll look forward to receiving that, Larry. Thank you for the information.

Next action item is the word response to OTIB-0019.

MR. HINNEFELD: Yeah, we have a statistician working on that so it's taking a little longer than other humans. But we will provide that. Now this kind of brings me to a question from my standpoint for how to submit new information now when we're kind of between the time when we were submitting it on the old matrix and between the time when we have the complete new format matrix because there are a number of pieces of information, not

necessarily 19-1, but it's a 17, three, four and five.

We have some initial responses from the second set of procedures. You know, several of those that never had initial responses. We have several initial responses to provide that are about ready that I didn't send out before this meeting because I just assumed we would work from the matrix we worked from in October. So in what fashion should I submit things like that now? Because I can send them at any time to allow the Board and SC&A time to look at them prior to the December meeting.

DR. ZIEMER: Let's see, we don't have the new matrix in place yet, right?

MR. HINNEFELD: Correct.

MS. MUNN: It would be nice if the information that Stu has on hand and ready to come up were to be included in the new matrix. That would be helpful.

MS. BEHLING: This is Kathy. Possibly if Stu could send that information to me along with everyone else, I will try to incorporate it, I will make sure it gets incorporated into

the new matrix for the December 11th meeting.

MR. HINNEFELD: Great.

DR. MAURO: This is a lot like OTIB-0006, -0007 and -0008 where we have reviewed it and found favorably and in the next version of the matrix you'll see it closed. So I assume that this might also occur with respect to OTIB-0019 and -0017, three, four and five. Are we in sort of the same mode of operation?

MS. MUNN: I believe so.

DR. MAURO: Okay, good.

MS. BEHLING: And, Stu, if you would just maybe include some specific words that you would like to have put into the matrix so that I don't misinterpret anything.

MR. HINNEFELD: Well, I hope to be able to provide it to you on the old matrix so you can just cut and paste, you know, our initial response --

DR. ZIEMER: That'd be the way to do it.

MS. BEHLING: That's great. That's fine. That's great.

DR. MAURO: Stu, this is John. Now, will you be issuing a new version of OTIB-0019 and -0017 similar to the way you dealt with the

previous six, seven and eight issue so that when we review it, we're actually reviewing the new document which has been modified to some extent in response to our comments? Or will you be providing us with what you would be considered something more like a white paper which would describe the kinds of changes that are being made as opposed to the actual document with its changes?

MR. HINNEFELD: Well, I would think what the, the way we've kind of thought about this for discussion is that we would, actually, we provide an initial response. We talk about in the meeting, and sometimes our initial response is, okay, we see your point. We will clarify this. And so sometimes we will commit to make a change, and then I guess we'll go into that in abeyance category we talked about a minute ago.

DR. MAURO: Very good. That was the reason I asked the question because depending on what material we receive, the designation would be either an in abeyance or closed.

MR. HINNEFELD: Right, I can provide like a decision point, too, that we will revise a

procedure, but far more quickly than I can provide a revised procedure. So I thought I'd probably continue to work kind of in that mode.

DR. MAURO: Okay, thank you.

MS. MUNN: Anything else on 19?

(no response)

MS. MUNN: Can we assume that the next item, OTIB-0017, falls in the same category or is there some more information we need to discuss?

MR. HINNEFELD: It falls in the same category from my standpoint.

MS. MUNN: John? Kathy?

DR. MAURO: That's fine. Sounds like the machine is working. The system we set up and the format and the designations, we're actually applying it right now as we speak, and it seems to be working well.

MS. MUNN: All right, then we'll assume that that's going to be the case.

I notice that on the agenda where we undertake SC&A with the action items, I had indicated that we would take a 15-minute break from 12:30 to 12:45. Well, it's coming up on

12:30. It was suggested to me before we made the call that I might consider the fact that some people have not had lunch. So what is the pleasure of this group? Is a 15-minute break at this time doable for you or do you feel like you need a half hour for food?

MR. HINNEFELD: Well, speaking for myself, I'd like to have the opportunity to eat lunch.

DR. ZIEMER: Can we get a half hour?

MS. MUNN: A half hour is not going to be a problem as far as I'm concerned. Shall we take a half hour? Is there an objection to that?

(no response)

MS. MUNN: If everyone's amenable with that then in lieu of --

DR. ZIEMER: Do you just dial in again? Do we break and then dial in again? Is that how it works?

MS. MUNN: I think it would be appropriate. We might as well break the line now, and we'll get back shortly after one o'clock, as close to one as we can make it.

DR. ZIEMER: Sounds good.

(Whereupon, a lunch break was taken from

12:30 p.m. until 1:00 p.m.)

MS. MUNN: John, are you there with us?

MS. BEHLING: Some of the initial items until John gets back.

MS. MUNN: Actually, I think we've addressed most of them down through the first batch.

MS. BEHLING: I think so.

MS. MUNN: Do that until John comes back on.

MS. BEHLING: Okay.

MS. MUNN: Ray, are you ready?

COURT REPORTER: Yes, we're on.

MS. MUNN: We are officially back in session, picking up the action items at the point where it says SC&A. The first item being reviewed modified OTIB-0008, -0006 and -0007 which I believe we've covered thoroughly.

MS. BEHLING: Yes, I believe so. I hope.

MS. MUNN: Are there any outstanding items in that regard or can we mark that off as complete?

MS. BEHLING: From my perspective it's complete.

MS. MUNN: Move on to the next one. I believe we've thoroughly covered that one, too, with respect to the format. I believe

we're all on pretty close to the same page as to what we're going to expect to see on the 11th. And I think Kathy has committed herself to do yeoman's work here. Is there any additional comment with respect to the matrix that we expect to see on December 11th?

MS. BEHLING: I have no additional questions. I assume you're asking the Board.

MS. MUNN: Yes, I am.

DR. ZIEMER: I don't know of anything else there.

MS. MUNN: All right, then let's move on down to Procedure 0090.

MS. BEHLING: This is an item that Arjun was intending to address. Now I know that John spoke with Arjun earlier today, and he was not in a position to participate in this conference call. And, in fact, I was anticipating an e-mail from him yet this morning to discuss this item. However, I haven't gotten anything from him yet. And so I'm afraid that this is going to have to be an open item because we haven't heard back from Arjun yet.

MS. MUNN: I did have a message from Arjun

to John. He copied me.

MS. BEHLING: Okay, great.

MS. MUNN: He said he had reviewed -- I'll read it for those who haven't heard it. "John, per our conversation on the task list below, I have reviewed your 0090, and it's essentially the same as Procedure 0004, 0005 and 0017, the point of view that the comments that SC&A made on the CATI procedure. Therefore, Procedure 0900 (sic) can be used to track SC&A comments and NIOSH responses." I think that's a typo on that procedure number. I'm sure he meant --

DR. ZIEMER: 0090.

MS. MUNN: "It may be useful to revise the matrix with the new section numbers in order to track this, but I have not done that." So that's his response at this juncture. I guess until Arjun is on the call, until he makes any suggestion with respect to revising the matrix with new section numbers --

MS. BEHLING: And I can discuss that with Arjun so that when the new matrix comes out, hopefully we can incorporate Arjun's comments into that matrix.

DR. MAURO: Wanda, this is John Mauro. I'm sorry. I was on the other line, and I got caught up in a conference call, so I'm a few minutes late, but I'm back.

MS. MUNN: Welcome back. We just dumped on Kathy while you were gone. We have gone down your list very quickly and determined that we covered virtually everything down through -- I was just reading aloud for the record Arjun's e-mail this morning on Procedure 0090.

DR. MAURO: Yes.

MS. MUNN: I don't think there's more that we can do.

DR. MAURO: Yeah, I spoke to him this morning.

MS. MUNN: They've been incorporated in the matrix.

DR. MAURO: Exactly right. When I spoke to him this morning he said that 90 did, in fact, roll up everything, but the issues are still there. In other words we can now zero in on 0090 as the document that becomes the place where we address the issues. But the issues that were originally identified in four, five and 17 are, in fact, still alive and well.

It's just that now we will be tracking them under PROC-0090.

MS. MUNN: Right.

DR. MAURO: Yeah, that was what he communicated to me this morning. He's out of town this week.

MS. MUNN: That will go in our action item in that form.

And the next one is the working matrix of the findings on Procedure 0092 of which you provided to us a couple of weeks ago, and I have that in here. And I trust all of the work group members have that. The next stop, of course, will be NIOSH responses. I think we've already covered that as well.

Stu, you indicated that would be forthcoming shortly, right?

MR. HINNEFELD: I was muted, sorry. I believe by early next week.

MS. MUNN: That's fine. So we've already discussed that. There's nothing further to comment through that item.

Does OTIB-0012 work up for us to consider in addition to the matrix? We've just received that. Don't know whether anyone

else has had an opportunity to do more than just look through it. That's all I have done. What is the pleasure of this group? Do you wish to address the content of that item, or do you wish to defer discussion on it until the 12th?

DR. ZIEMER: It seems to me that doesn't NIOSH need to react to this now?

MS. MUNN: It would appear to me that --

DR. ZIEMER: I read through it, but, and it's fairly technical. I think that they are taking issue with a couple major points so that we need to probably hear back from NIOSH or at least the response.

MS. MUNN: Agree, NIOSH?

MR. HINNEFELD: Yeah, we believe we should provide a response to that. I'm trying to find which set of procedures was TIB-0012 in.

MS. MUNN: Hold on. I'll see if I can, I'm sure I can help you with that.

MS. BEHLING: I believe TIB-0012 was in the second set of procedures.

DR. MAURO: Yes, I'm looking at it right now. Yeah, it's in the second set.

MR. HINNEFELD: Well, for ^ purposes will

there then be sort of a matrix prepared or is there a single finding? I mean, the nut of the findings be captured and put in this -0012 then so ^?

DR. ANIGSTEIN: This is Bob Anigstein. I'm the lead in preparing this white paper which went out yesterday, and essentially we did a second review. The initial review of TIB ^ since the TIB-0012 held the statistics we had it reviewed by our inhouse statistician, Dr. Harry Chmelynski. But that review did not address the OSHA construction or physics aspects of it. So in the process of preparing for an earlier working group meeting, we looked at it again.

I looked at that one, and some issues that had previously not been captured came to the forefront, and that's what the white paper is about. That we don't quarrel with the mathematics of the statistics, but we do have an argument about the assumptions, about the distribution, and primarily, it goes not so much, TIB-0012 utilizes the OCAS-01 Procedure, Appendix B. And we have a concern about the triangular distribution of the dose conversion

factors and the way they utilize and the way they're utilized in the procedures of TIB-0012.

MR. HINNEFELD: Well, I mean, we can treat it as -- I think I've got the nut of the paper. I read it, and I think I kind of understand the gist of it. I mean, we can treat that as a finding in a matrix. Or if there are other things, I mean, other findings you feel like there are multiple things that should be addressed, then I guess I would hope to get a little more clarity about what the multiple things are.

I mean the one thing that seems to be addressed is that the existing approach essentially assumes a uniform photon distribution over the energy range. Is that right?

DR. ANIGSTEIN: No, it doesn't actually. The point is the existing approach treats the various dose conversion factors for different energies. Let's say, the example was 30 to 250 keV of photon energy range as if these were like independent data points, and, in fact, they're not. Not only that, but this is

from ICRP-74, they're not evenly spaced. The lower energies are more closely spaced ^ arithmetic approaches, and as you get to higher energies the spacing is wider and wider.

And so the approach used by assigning the mode to the middle one of the, I believe there were seven that fell into this range, is not claimant favorable, and it's not scientifically justified. So there were two suggestions made, and one is if it was a stop gap measure it would probably suffice to simply put the maximum ^ .

But in the case of the colon the maximum dose conversion factor I think was something like 150 keV. It was not the highest. In other words it peaks and then it goes down again with energy. So that would be one way. And that's inarguable. It can't be any more claimant favorable than that.

And then the next was a suggestion to replace the Appendix B distribution with doing MCNP calculations for each organ. It doesn't have to be for each dose, dose reconstruction. Replace that with a set of generic tables of

say a generic exposure scenario like you already have in the very difficult TIB-0004 where there's a generic exposure to a slab of uranium and to use AWEs.

And something along that line so that for a given worker you say, okay, this is a typical exposure that this worker had. This is a typical radiation field which he was in. And then it will be possible in a single MCNP run to address all 16 major organs.

MR. HINNEFELD: Well, we'll have to --

DR. ANIGSTEIN: I mean, it's a lot of detail probably.

MR. HINNEFELD: -- look through it and decide our response.

DR. MAURO: Stu, this is John. By way of bookkeeping, as you know, we do have a standing concern with Appendix B dose conversion factors that you folks are in the process of revisiting. And that more or less had to do with the ISO and GA geometries and those concerns.

Now what we have here is really another layer of concern that actually applies also to the AP. As you know, historically,

the position was, well, the AP approach, you know, as long as you're working with the AP you're okay and don't use the others. And I think that was generally agreed across the board.

What we're saying now is that, well, we also have some concerns with using the current version of the triangular distribution for AP. And now where I'm going with this is that this in theory could become part and parcel as one more aspect of your consideration of Appendix B to OCAS-001, and it could fall into that category. And in those terms I don't know if you would call it transferred, or we could refer to it as this being addressed as part of the particular issue currently being addressed as part of OCAS-001 which goes back to the original first set of reviews.

This is really a choice that the working group has. We could either deal with this as a stand-alone issue and incorporate it as a stand-alone issue in the next version of the matrix with these issues identified, and, of course, leaving a blank space for you folks

to fill in your response to it. Or we can designate this as something that is being handled under one of the, whatever the appropriate issue is under our review of OCAS IG-001.

DR. ANIGSTEIN: John, I'll make a comment.

DR. MAURO: Sure.

DR. ANIGSTEIN: TIB-0012 and OCAS-001, Appendix B, are really inseparable, so you can't really address one without the other.

DR. MAURO: Well, but that's why I bring this up. I mean, it may turn out that it's most convenient and expedient just to integrate the whole issue as an Appendix B, OCAS-001 issue that is currently being addressed as opposed to breaking this out separately.

DR. ANIGSTEIN: If Appendix B is fixed, then TIB-0012 goes away.

DR. MAURO: Yeah, up until now the particular issue that you raised, Bob, was not an issue that we --

DR. ANIGSTEIN: Yes, I understand that.

DR. MAURO: Right, so this becomes an added item to the Appendix B OCAS concern.

DR. ANIGSTEIN: Right.

DR. ZIEMER: Could I ask you a question on the white paper? This is Ziemer. Bob, I'm looking at Figure 1, which is the draft or the curve for the DCF factor ^ of energy. So are these the NIOSH data points?

DR. ANIGSTEIN: No. Well, yes, yes, I --

DR. ZIEMER: Oh, they are. What I'm trying to understand, I think what you're saying is if they said the sixth point is the mode, well, fifth or sixth, and you're saying, yes, but the energy intervals are not evenly spaced.

DR. ANIGSTEIN: That is correct.

DR. ZIEMER: So statistically to call that the mode of the distribution may be statistically invalid. And I think what you're saying is instead of about 0.75 or four, whatever that is, use the upper end --

DR. ANIGSTEIN: It goes, it's more than that.

DR. ZIEMER: It levels out at 0.8 or 0.79, but --

DR. ANIGSTEIN: No, it's more than that because it's not a triangular distribution.

DR. ZIEMER: That's right. I understood that. I was just trying to understand the point --

DR. ANIGSTEIN: My argument is not with the value of the mode as much as with the whole concept because when you fold the triangular distribution into the normal distribution of dosimeter errors, you come up with a mean that is much lower.

DR. ZIEMER: Than this mode.

DR. ANIGSTEIN: Yes.

DR. ZIEMER: Okay, I get you. And then the claimant-friendly values then are different, is that what you're saying?

DR. ANIGSTEIN: Yes, and my recommendation as the simplest method would be simply to use a fixed value, not use a triangular distribution which is a fixed value in this case of 0.798, and then fold that fixed value into the distribution of dosimeter error and whatever other value the distributions there are.

DR. ZIEMER: And have you looked at the impact that that has or does that make a big difference?

DR. ANIGSTEIN: We did not run IREP to see, you know, to see the two different methods. We just simply compared that the mean of the distribution that is tabulated in the back of TIB-0012 in this instance was about 38, in other words, you would have 38 percent higher dose if you used the single value that I suggested of 0.798 as opposed to the mean of 0.59. Now, I realize the mean is not a single value, so I'm not certain how it would, we didn't go that far. We certainly could if we're asked to. I mean, there would just be a bigger effort if we were asked to prepare essentially a one-page white paper which turned out to be three.

DR. ZIEMER: Well, I guess we need to hear the response from NIOSH on this and see whether it's significant or not.

MS. MUNN: Can we suggest that NIOSH and SC&A discuss this offline? And that do the ^ that are enumerated in the white paper to have that discussion available for us then when we meet face-to-face in December. So can we capture the key issues, the interests that we have. Can we do that, Kathy?

MS. BEHLING: I believe that'll be fine.

Bob, are you in agreement with that?

DR. ANIGSTEIN: I'm not too -- I have a little trouble hearing, Wanda. Could you restate that?

MS. MUNN: I'll try it with my handset. Maybe I'm a little too far from the phone.

DR. ANIGSTEIN: Yeah, that's much better.

MS. MUNN: I'm suggesting that we have a communication between you and NIOSH with respect to the points that you've raised and that we've discussed here to see if there can be a meeting of the minds. In the meantime, Kathy will try to capture the key issues on the matrix so that we will have written record on it and a proper place for this white paper to go when these issues are resolved. And that we will then address them December 11th. Is that reasonable?

DR. ANIGSTEIN: It's fine by me.

MS. BEHLING: And that's fine by me. I can certainly add these items to the matrix.

DR. ZIEMER: I just want to make sure I understand. There's two issues here I guess. One is the issue of the triangular

distribution versus the point value.

DR. ANIGSTEIN: Uh-huh.

DR. ZIEMER: Is that one? And then the other is the use of the mean or the mode versus use of the bounding value?

DR. ANIGSTEIN: Well, if we use a point value, then the triangular distribution just goes away.

DR. ZIEMER: Right, that goes away.

DR. ANIGSTEIN: And then the mode would go away.

DR. ZIEMER: And the point value would be the upper end of this curve?

DR. ANIGSTEIN: Yeah. But the other suggestion would be if you wanted to go that extra mile to make the most precise, you would come up with a single value. My envision is let's say for this colon case, once you define an exposure, a generic exposure geometry for a particular class of workers at a particular facility, then you could do an MCNP run where you could say, okay, then the photons in the 0 to 230 keV, 30 to 250, 250 to and above 250 and see what the actual values are as compared to the HP-10. And the ratio of that would be

your conversion factor.

And the additional advantage of that you would have a precise way of knowing what fraction of the photons to assign to each of the three ranges which now is not clear in the various site procedures that I've seen how those fractions are arrived at. And since you can do multiple organs in one run it wouldn't be that labor intensive.

That's just a suggestion. But certainly using the maximum would do the job, would be claimant friendly, and there would be a reasonable basis for it.

MS. BEHLING: This is Kathy Behling. I also think that it just makes it cleaner. And I believe it might be a little bit more organized for us if we put these findings under OTIB-0012 and indicate in there that this also impacts Appendix B of the Implementation Guide.

DR. MAURO: Yeah, what I was thinking from a practical sense the solution, and let's say there is a resolution to this particular item related to this procedure. It will have a ripple effect on NIOSH in terms of the work

it's doing across the board on Appendix B to OCAS-001. So I mean, they're connected at the hip, and it's going to be important that whatever is decided and done for -0012 will have certainly an effect on how the bigger picture, the Appendix B issue, is ultimately resolved.

MS. BEHLING: And we've done that in the past just like an example is OTIB-0023. When Hans reviewed that, he had, because that was also linked to the Implementation Guide. It's being tracked under OTIB-0023, but the Implementation Guide issue was discussed and NIOSH is also going to address the Implementation Guide along with OTIB-0023. So this has been done before.

DR. MAURO: Okay.

MS. MUNN: So we're back to our suggested process of NIOSH and SC&A discussing this offline to see if they can reach a resolution of the issues. And we will incorporate the two issues that were raised in the white paper and try to capture the essence of them on the matrix and discuss it at the December 11th meeting, right? Is that agreeable?

DR. ZIEMER: Sounds good.

DR. MAURO: Yes.

MS. MUNN: All right, anything else on that particular item?

(no response)

MS. MUNN: If not, then let's go to response to OTIB-0017-06 and report the position to the work group. We had talked about -0017-06 before.

MS. BEHLING: John, that's you.

DR. MAURO: I was on mute, and I was looking at it and --

MS. MUNN: Prior adjustments LOD.

DR. MAURO: We did not prepare anything in response to this.

MS. MUNN: Okay, so it needs to be a carryover?

DR. MAURO: It'll have to be a carryover. I apologize. I did not take action on this.

MS. MUNN: That's quite all right.

And the next items were --

DR. ZIEMER: Does that, that was a matrix item?

MS. MUNN: That was a matrix item, uh-huh, very near the tail end where we stopped.

NIOSH and SC&A were to discuss OTIBs -0006 and -0007 to determine if they need to be reviewed as documents that have been modified as a result of review or as new documents. And the decision is?

MS. BEHLING: The decision was that this was just a modified document based on our initial findings, and as we discussed earlier, I've already reviewed these two TIBs.

MS. MUNN: Fine, I think we covered that pretty thoroughly earlier in the call. Anyone have any objection to calling that one complete and moving on?

DR. ZIEMER: No.

MS. MUNN: The next item we have is conducting further clarifying technical discussions on OTIB-0023 and reporting those out to the work group.

MS. BEHLING: On this item Hans and I did talk with Stu on Monday, the 5th, and I think we have come to resolution on the OTIB-0023 findings.

And, Stu, I'll let you elaborate.

MR. HINNEFELD: We believe there are some clarifying revisions that we can make in OTIB-

0023 and then also it affects IG-001, probably a page change in IG-001. That will, that's the findings.

MS. BEHLING: And I believe, Stu, during our conversation on Monday, Stu also indicated that he would put together wording as to what those changes will be and that will get incorporated again into the new matrix.

MR. HINNEFELD: Right, this is part of the new information I'll provide to Kathy fairly quickly and should be available to the matrix for the next meeting.

MS. MUNN: That's good. All right. Fine, then we can anticipate that that will be incorporated in the next matrix, and that the only comment that we'll have ^ items, resolution incorporated.

The science issue is something that I don't see that we can address here at all. That's another one of the things that we need to discuss with the full Board, try to make sure that we're covering this in our matrix process and do it adequately.

RESUME MATRIX ITEMS

Now we are ready to pick up where we

left off at our last meeting with Supplement 1 Procedure Findings. We were on OTIB-0017-09. It's page 13 of our matrix items. I believe it's September 25. Are we all there?

DR. MAURO: Yes. We're at the point where I guess the ball's in my court. This is John. I reviewed all of the remaining OTIB-0017-09 through, I guess, it goes on to the last one on 15. And where we are, we'll start with -09.

You know, we consider that the response is acceptable, and as far as we're concerned, number nine is closed.

MS. MUNN: Excellent.

DR. ZIEMER: Hang on just a second. What's the date of the matrix are we working from?

MS. MUNN: We're working from the same matrix we were using at our last meeting which is, the original date on it was May 21st, 2007, but the revised draft that we were working from is dated September 25, 2007.

DR. MAURO: The NIOSH responses that we're looking at are all in red.

MS. MUNN: Uh-huh.

DR. MAURO: By the way, the reason you'll

see for many of my comments which I believe you're going to find that they're primarily closed, is the general concept that we don't look at OTIB-0017 in a vacuum.

This is sort of like a policy judgment that we all discussed during the last meeting where the fact that a particular piece of information is not explicitly provided in this particular OTIB but cross-references other OTIBs, the site profile, the way we're looking at this now is that we look at the particular OTIB as just one part of the suite of guidelines that are available to the dose reconstructor.

And as long as there's enough language in the OTIB to alert the dose reconstructor that there is ^, and there are other guidance out there that needs to be considered. In the case of number nine, for example, the response basically says, well, the ^ radionuclides and their energy distributions are all really laid out on a site-by-site basis in the site profile. And we accept that.

So that in effect it goes without saying that, of course, when you implement

OTIB-0017, you take into consideration the rich information that's contained in the site profile. And it is there. You know, the site profiles do talk about the radionuclides except if there's an issue on a particular site profile where that issue is incomplete.

So we have a bit of a, I guess what we have is a situation where we agree with the concept. Namely, if the site profile is basically complete in addressing the range of radionuclides that are at play, then the dose reconstructor is in a position to make an informed judgment on what the energy distributions may be that he's dealing with when he's implementing OTIB-0017. So that's the reason why we feel the issue has been resolved.

MS. MUNN: Okay, Paul?

DR. ZIEMER: Uh-huh.

MS. MUNN: Move on to Finding 10.

DR. MAURO: Same thing. It's the same kind, the answer is, yes, this issue is closed from our perspective because in effect you can't expect the OTIB to do everything, and the DR, the dose reconstructor, has access to a lot of

other information that's going to allow him to do this in an informed way. And we agree that that has to be the way it's done because it's impossible for any one OTIB to capture everything. So again, for the same reason, number ten we feel is a closed item.

MS. MUNN: Eleven skirts around the item we were just discussing in 12.

DR. MAURO: Yes, it's the same thing.

MS. MUNN: ^.

DR. MAURO: Yes.

MS. MUNN: Item 12.

DR. MAURO: Twelve is a little different. It's basically NIOSH agrees that perhaps a little bit more clarity is needed, but it will be done at a convenient time. In other words at the time when there are revisions this kind of clarification, this is more of a housekeeping issue than it is something of technical substance.

So as far as we're concerned, you know, during due process of upkeep on these various OTIBs, this type of comment, number 12, is certainly easier to take care of during the next round of revisions. So whether you

want to consider that closed or in abeyance I'm not quite sure.

MS. BEHLING: I consider that in abeyance.

DR. MAURO: Okay, very good. That's helpful because we're really testing the system now and how we're going to classify these things.

MS. MUNN: Does anyone disagree with Kathy? It's in abeyance to me.

DR. ZIEMER: Uh-huh.

MS. MUNN: And OTIB-0013 is a bit of a different thing.

DR. MAURO: Again, you notice the cross-referencing to, it looks like the response makes reference to PROC-06, and so from that perspective, yes, we agree, and we consider this to be closed.

MS. MUNN: And, Kathy, do we consider that a transfer then?

MS. BEHLING: Actually, I just walked away to look for something for a minute, and I apologize. I'm going to have to ask John to repeat what he said. I apologize.

DR. MAURO: Yeah, Kathy, what's happening here is a concern is raised here. The issue is the OTIB does not identify any cases where

a possibly high POC can be determined early in the investigation. So in other words, it's part of the triage process. That is, when you're using OTIB-0017 for shallow dose, there's a triage process.

And our concern was that it's not apparent what that process is. But then the response appropriately so is NIOSH says, well, wait a minute, the triage process is described in PROC-06. That's where that issue is addressed. So I consider that, you know, given the context that there's inter-linkage between all these procedures, I consider that to be responsive to our concern, and from my perspective it's closed.

MS. BEHLING: Let me ask a question. Does OTIB-0017 prompt the dose reconstructor to go to PROC-06 for that triage process?

DR. MAURO: Yeah, in the response in red you'll see the last sentence says in addition OTIB-0017 does give guidance on the topic of a low-high POC potential on page six, items A, B and C. So there is a pointer.

MS. BEHLING: Okay. Then that's closed.

DR. MAURO: Yeah, so that's why I considered

that this is responsive. Now I have to say I didn't go back to PROC-06 and a review on that to see if there's anything outstanding related to this matter, but I just accepted the fact that this is an issue that's closed because PROC-06 addresses this concern. Now whether or not we have an issue with PROC-06, I'll be the first to say I did not go back and check out where that stands.

MS. BEHLING: We are addressing PROC-06. We addressed PROC-06 in our first set, and we're also addressing it in our third set. So all of the findings and issues should be covered in the next set, the third set.

DR. MAURO: Okay. Now, that brings me to the question of one of designation. Since this response basically says there's a point at the PROC-06, now if the fact that PROC-06 may be still active, do we close this or is this in abeyance? These get awful complicated.

MS. BEHLING: No, I think we close this.

DR. MAURO: Okay.

MS. BEHLING: I think the only thing I would suggest is maybe let's just go back and look

at PROC-06 and be sure that that does satisfy. But if NIOSH says here that they pointed to PROC-06, I think that that should satisfy us.

MS. MUNN: I agree.

All right, item 14.

DR. MAURO: Okay, item 14 is a long one, and I believe that this item is, the response is fully responsive to our concern, and I think we believe that this issue should be closed.

MS. MUNN: The 14 is acceptable.

DR. MAURO: Yes, and the same thing holds for 15.

MS. MUNN: Finding 15.

DR. MAURO: Yes, it's the same situation.

MS. MUNN: That's a long one.

DR. MAURO: Yes, that's a long one very much related to the previous one.

MS. MUNN: All right, acceptable.

DR. MAURO: So we believe that that's responsive and consider the item closed.

MS. MUNN: All right, very good. We do not have another NIOSH response until page 17 on OTIB-0009. This one being addressed is a global issue with the Procedures working group. That's, as I see it, a matter of just

identifying that properly on our page in our new matrix.

MS. BEHLING: Okay, we'll do that.

MS. MUNN: ^ item that I see is page 18, OTIB-0028-01 you have been provided?

DR. MAURO: Yes.

MS. MUNN: Acceptable?

DR. MAURO: Yes.

MS. MUNN: So page 19, -0028-04.

DR. MAURO: We find this acceptable. Namely, that the answer is that when such a situation arises, they'll be dealt with on a case-by-case basis. In effect, yeah, we raised the question that there are certain circumstances that are not explicitly covered by this protocol in OTIB-0028. And the response is that it will be dealt with. When such a situation arises, it will be recognized and dealt with on a case-by-case basis.

I'm not quite sure whether the OTIB alerts the reader to it so maybe I have to go back and take another look at it. But maybe Stu is in a position to, is there, in other words if this circumstance arise, in other words where you're dealing with an AMAD

different than five micron, the concern is quite straightforward.

There are circumstances when your aerosol may be substantially different and smaller than five micron AMAD. And under those circumstances the doses could be substantially higher if it's smaller especially for the lung for example. And the response is that, well, if that situation arises, do you have the wherewithal for dealing with it.

And I agree with that. That is, you know, you could put in different particle size distributions into IMBA and deal with it. The only question I had, I guess, for NIOSH was, is that discussed. I believe it might be addressed in OCAS-002, IG-02, where you deviate from the default on a case-by-case basis.

Stu, am I correct with that?

MR. HINNEFELD: I think that might be likely to be the place where it is although sitting here today I couldn't tell you for sure.

DR. MAURO: Okay.

Here's a question to the, this is

almost like a generic issue. This is a great example. The procedures all follow standard ICRP protocol. So when you do an internal dosimetry for inhalation, automatically you go with the five micron AMAD.

And my understanding is unless there's reason to believe that that aerosol particle distribution might be substantially different, as might be the case if you had a fire and there was a fume or you were doing welding and you're dealing with a fume where the particle sizes are less than one micron, there really is no reason to deviate from the five micron.

The question becomes how explicit would, for example, OTIB-0028 need to be in terms of its guidance to the dose reconstructor to alert him to the conditions under which when he may need to deviate from the standard protocol and what to watch out for.

Right now, I'm not quite sure. I'd have to check again, but I don't think OTIB-0028 goes there and gives you pointers when you may have to deviate from this procedure, but OCAS-001 does, OCAS-IG-01 does. When you

read through that big, thick guideline, it does talk about particle size distributions.

So in a way, the way I guess I'm looking at it, and why I would say that, probably this is closed is that when you take it, when you realize that OCAS-001 being the platform that you're building from and that's given as, that is, that's what the dose reconstructor is fully aware, fully trained in the use of OCAS-IG-02 -- I'll cite that one, too -- then you could use OTIB-0028 in a very informed way.

So the question becomes to what extent does OTIB-0028 need to tell the dose reconstructor that. This is a recurring theme that we run into a lot in all our reviews. You know, how much information really needs to be put into any given OTIB?

MS. BRACKETT: This is Liz Brackett. If I could throw something in here. OTIB-0028 was intended to just document the dose conversion factors that we're using for thorium because the values in IMBA are incorrect. So it wasn't intended to go over all of the specific details. We did have OTIB-0060, which is

internal dosimetry. It's not very detailed in here but there is a paragraph on particle size distribution that says the default is five microns, and this value is to be used for evaluating information intakes in the absence of known information as documented in the site profiles or the case file. And so this is supposed to be the guidance for general internal dosimetry issues. And maybe that could use a little bit of strengthening, but OTIB-0028 wasn't really intended to go over all the details related to thorium.

DR. MAURO: Yeah, I understand that, and I guess it's just a matter of, I think that philosophy, the strategy for, as long as everyone really understands that we're really building a system of guidance documents that are all interconnected and interdependent. And that there's a training program so that everyone is fully apprised of the array so that they could use any one document properly within the context of its intent and with due consideration of the other documents. That being the case, an awful lot of our findings go away.

MS. MUNN: Stu, can we be reassured IG-02 is such a basic tool that dose reconstruction would be --

MR. HINNEFELD: Well, I think the document that Liz mentioned, the OTIB-0060 or PROC-60, whichever it is, that is described, you know, the title is "Internal Dose Reconstruction" is probably a more commonly referenced direction and probably a more commonly used as long as anybody ever comes new onto the program any more that that would be the location where you would expect it. I think IG-02 is like the fundamental underpinnings, but I don't know that very many people rely on it for a day-to-day instruction.

MS. BEHLING: This is Kathy Behling. What I see in dose reconstruction reviews is exactly that. Typically, they will go to the OTIB-0060 now as opposed to the Implementation Guide, but I do think OTIB-0060 does provide an adequate explanation of this.

MS. MUNN: We can call this acceptable given the circumstances.

DR. MAURO: I agree.

MS. MUNN: All right. ^ closed on item 6-

04. Likely the same would apply to 11-01, outstanding issue there, 01 and 02. More issues?

DR. MAURO: I'm sorry. I just lost track a bit. Are we, which OTIB are we on now?

MS. MUNN: We're on OTIB-0011.

DR. MAURO: Eleven, that's the tritium one, okay.

MS. MUNN: One and two.

DR. MAURO: Yeah, we've resolved that previously I believe.

MS. MUNN: There was just a slight addition there. I wanted to make sure it was acceptable and closed.

DR. MAURO: Yes.

MS. MUNN: OTIB-0019-01.

DR. MAURO: Let me get there. I'm flipping through my big book. It's a little easier for me to get oriented.

MS. MUNN: That's all right.

MR. HINNEFELD: Oh, 19-01 is the one we talked about off the agenda. That's where we owe an alternative response which is not yet ready.

DR. MAURO: Oh, yes, yes.

MR. HINNEFELD: That was one of our action items from on the agenda.

MS. MUNN: Right.

DR. MAURO: Yeah, we discussed this previously, that's correct.

MS. MUNN: That's right. My action item that I did record back up there was reword OTIB-0019 in process. Forward the responses before the 11th, right?

DR. MAURO: Right, I recall this. As a matter of fact Bob Anigstein might be on the line.

DR. ANIGSTEIN: Yes. If I remember correctly, Jim Neton said that they're going to reword the OTIB-0019.

MS. MUNN: And that's just what I have on my notes, for action. All right.

TIB-0012, no response required, that one's closed?

DR. MAURO: Yes.

DR. ZIEMER: Twelve was just discussed.

MS. MUNN: Yes. OTIB-0004, response from NIOSH.

DR. MAURO: This has some history. A lot of the issues that are still active here are

going to some global discussion regarding ingestion, oronasal breathing, that sort of thing. I'm not sure how we resolved them at the last meeting, but we did speak to this extensively.

MS. MUNN: Well, it says in another context that it would go to the global issues. Is that the same? Is it also true here? What do we want to do with this one? So work group members take a moment to refresh your memory and read the wording on this one.

(Work group members comply)

MS. MUNN: Does this go to global issues under the --

DR. MAURO: I think each one has its own little story, and I think they're all in hand so to speak. They're being dealt with. I believe, you know, for example, the very first one, number one, goes toward the inhalation rate, 1.2 cubic meters per hour. And also at the same time if you remember when we started to discuss the 1.2 cubic meters per hour as a generic value, we also found ourselves diverting into, wait a minute. Is OTIB-0004 intended solely for uranium metal facilities

or does it also include processing facilities?

And that was an important issue that NIOSH previously reported back. This was like an issue that I don't think was actually written up. But NIOSH reported back to confirm that OTIB-0004 is only for metalworking facilities and did not apply to, and that sort of closed that out. So I think that issue was raised. That was actually captured here on page 21.

MS. MUNN: That's acceptable, and we can close that one.

DR. MAURO: Right.

MS. MUNN: ^ --

MR. GRIFFON: I'll tell you, Wanda, one comment on that though just for other readers that NIOSH response in red doesn't respond to the findings so it's kind of confusing.

DR. MAURO: That's correct.

MR. GRIFFON: I understand after John's explanation, but just to, I don't know how we deal with that, but --

DR. MAURO: And I get back to the 1.2. I only brought that up because that issue did come up. Somehow it emerged over the course

of the 1.2.

MR. GRIFFON: I know. I was reading the response and saying how does this relate to the breathing rate? It doesn't really.

DR. MAURO: I think the breathing rate is part and parcel to the, in other words, when do you deviate from 1.2, and you go to 1.7? That was one of the concerns. And I think that while I know that there are times when NIOSH does use 1.7 as being an upper bound for very heavy work, and we did discuss the fact that since OTIB-0004 is a generic bounding protocol for denial only for AWE facilities metalworking.

We all agree that that kind of work very often is very strenuous. And the issue had to do with whether or not it makes sense for OTIB-0004 to use something other than 1.2. I think you may have gone to 1.7 in Bethlehem Steel. I'm not sure. But I don't know if this issue is resolved.

MS. BEHLING: This is Kathy. I don't consider this issue resolved. I believe this is still, that it could be transferred to the global issue, but it's still an issue that

needs to be discussed. That's my reading.

MS. MUNN: Well, my reading is that we captured that in two where we specifically said that the breathing is a global topic.

MR. HINNEFELD: Two describes oronasal breathing, in other words people who are mouth breathers, that impact. That is the breathing rate, and that's 1.2. If I'm not mistaken, 1.2 cubic meters per hour or whatever, is a combination actually of at rest and heavy labor. So it's not like people are taking it easy and breathing 1.2 cubic meters per hour. It's a combination of at rest and heavy labor. And there's some discussion I believe about can someone really work eight hours laboring so hard.

DR. ZIEMER: Well, we had that discussion at the last Board meeting. I think Jim Neton --

MR. HINNEFELD: Jim was on at the last one, and --

DR. ZIEMER: And Jim cited some reference indicating that a worker could not work at the heavy rate for eight hours.

MR. HINNEFELD: Right.

DR. MAURO: You're right. Yeah, I recall

that.

MR. GRIFFON: But I think that was kind of, it's going back to the global question. I think that was kind of Jim's update on those. I mean we haven't seen necessarily a white paper on that from Jim.

DR. ZIEMER: Right, that was a status report at that point. But I think the 1.2 is not necessarily just a light breathing rate. It's some kind of a --

MR. GRIFFON: Agreed, yeah.

DR. ZIEMER: I guess the question is what do we do with this at this point.

MR. GRIFFON: I think it's going to be one of those topics that's going to be in that generic paper. Is it not being addressed in addition to oronasal breathing? Isn't it for also part of --

MR. HINNEFELD: I'd have to talk to Jim.

MR. GRIFFON: Yeah, I'm not sure either.

DR. MAURO: Yeah, when we had this discussion, I mean, Jim certainly made a very convincing argument that you're not going to have someone working eight hours a day at 1.7. He'd hyperventilate. And I know I certainly

believe that, but that was the response. Now the question becomes to what degree do we need a white paper or something, in other words, in order to close this item, do we need something, a record, saying, listen, here's the reason we, and I certainly accept that as being, you know, we did not investigate that.

MR. GRIFFON: I would think we do, John, because on those overheads that Jim showed also there was some, at least to me, there was some numbers that weren't intuitively obvious. I mean, they were kind of counterintuitive, a couple were --

MR. ELLIOTT: This is Larry Elliott. I'm sorry. I was answering, but you couldn't hear me because I had you on mute, and Stu stepped in there thankfully. But I do want to reiterate that, yes, Jim will be preparing a summary paper on this issue, and that's what you should be waiting for.

MR. HINNEFELD: Well, that's where it's at now.

DR. ZIEMER: It is kind of a global issue, isn't it?

MR. ELLIOTT: Yeah, it's a global issue.

You know, we don't consider it to be wrapped up and final because, just because Jim made a presentation of it at the Board meeting. There's got to be this delivery of this paper, white paper, on it.

MR. GRIFFON: Sounds good.

MS. MUNN: Well, our action item here is that both -01 and -02 are actually global topics, and that NIOSH will present a white paper, right?

DR. MAURO: Can we label this transfer-global issues?

MS. MUNN: That would be my assumption. Kathy?

MS. BEHLING: That's what I believe, yes. And I'll also make note that there'll be a white paper being presented.

DR. ZIEMER: In fact, notice down the next item, the oronasal breathing issue pops up again.

MS. MUNN: Yeah, that's why I was saying both 01 and 02.

DR. ZIEMER: And 02, yeah.

MS. MUNN: They both go in the same direction.

So for the next NIOSH response...

DR. MAURO: Well, 03 and 04 are dealing with, I believe, recycled uranium and the documentation. The concern was in OTIB-0004 there are certain default values for recycled uranium imbedded in the matrix. And the response that NIOSH gave is that they're looking at that on a generic basis. I guess there's an OTIB-0053 that's coming out. So the way I see it is that both these items would be transferred to the review of OTIB-0053.

MS. MUNN: Both of the remaining OTIB-0004 items.

DR. MAURO: Yeah, that would be number three and number four under OTIB-0004.

MS. MUNN: Move to OTIB-what?

DR. MAURO: OTIB, O-R-A-U-T OTIB-0053.

MS. BEHLING: Stu, is that out yet?

MR. HINNEFELD: Not yet.

MS. MUNN: Pending. As I go through this looking for other responses from NIOSH that we haven't addressed yet, and these items that we still are carrying that you know can be closed for any reason, please stop us.

The next item that I see is on page 26, ORAU OTIB-0014, finding 1. It's going to be --

DR. ZIEMER: Does it start on 25 or, oh no, I see it, 26, yeah.

MS. MUNN: It's 26 and it goes immediately to seven. Most of it's on 27.

DR. MAURO: I'm sorry, Wanda. We're on OTIB-0014 now?

MS. MUNN: Yes, we're on OTIB-0014. ^, Stu?

MR. HINNEFELD: It's OTIB-0014.

MS. MUNN: OTIB-0014-01.

MR. HINNEFELD: This OTIB concerns assignment of environmental internal doses for workers not exposed. In other words when, it's a technique for environmental internal. The first finding here has to do with, you've got to be cautious when applying this approach to construction workers, and we feel like maybe that comment has been sort of overcome by the issuance of the construction worker OTIB, OTIB-0052. But we agree that, yeah, these are kind of special situations.

DR. MAURO: Wanda, we agree with that. That is, OTIB-0052 on construction workers is a

major OTIB. I believe we have already begun the process of that. I think it came up in one of our meetings, but that has, that's sort of like a standalone big special one.

DR. ZIEMER: Right, right.

MS. MUNN: Yes, it is. And so -0014-01 is acceptable and can be closed?

DR. MAURO: Do we close that or do we transfer it to -0052?

MS. MUNN: Transfer it to -0052.

There's OTIB-0025-01.

DR. MAURO: Give me one second. Oh, I believe this item is, well, let me tell you what it was. I believe it's closed. It has to do with the radon breath analysis for the purpose of determining body burden.

DR. ZIEMER: Yeah.

DR. MAURO: And I may need a little help here. The way I understand it is that when you take the radon breath sample from a person, depending on his level of activity, that is, his breathing rate, will have a substantial effect on the results. So in other words, if he's resting, so you're going to collect a sample there to get a number of,

I guess, picocuries per -- I'm not quite sure of the units -- but the breathing rate will affect the rate at which radon is being exhaled. And therefore, affect how you convert that measurement on exhaled radon to what the body burden is.

And I believe the response was, well, we're doing it the right way. We're using default ICRP-66, a breathing rate of 20 liters per minute in performing this calculation. And I guess I'm not familiar enough with this particular protocol except I know that it was reviewed in detail by Mike Thorne (ph), and he came away favorable. In other words, he was very favorably, he gave high scores.

The only thing he cautioned, and it was really more of a caution, that when you're looking at this data and interpreting the data and then assigning radium body burden based on the data, that you could be off by, I guess, not an insignificant amount depending on the conditions under which the breathing zone sample was taken. And that was a caution.

Now I guess I'll punt at this point. To the extent to which your protocol and how

you use the data for radon breath analysis takes into consideration that concern. I mean, if your protocol takes --

DR. ZIEMER: That's more of a sample handling concern though, right?

DR. MAURO: Well, it's sort of like when the original sample was collected, in other words, let's say we have a record of a person that we can estimate his body burden based on radon breath analysis. And the only caution was that there is a standard protocol, I guess, that, the assumption is made, I guess, that the sample was taken when the person's breathing rate was 20 liters per minute. So that's sort of like built into the analysis.

And the reviewer, Mike Thorne, simply pointed out if that wasn't the case at the time of the sample whereby the breathing rate was substantially different, you're not going to get the right number, and you could possibly underestimate or overestimate. And that was the concern.

That's about the best I can do to communicate what the concern was, and I guess I'll leave it to NIOSH. If you have that well

in hand that's fine. Or if it's really an issue that's a minor issue and marginal but that was the concern that was expressed, that you could be off by a lot. And I think Mike Thorne in his write up, you know, the big report, goes into that a little bit.

MR. HINNEFELD: Well, my reaction originally is that I don't think that we hardly ever use that. I mean, there are not that many instances where we have radon breath data at only a handful of sites, and so this isn't used a whole lot. And I guess I can't speak any more knowledgeably about it right now.

So I guess, John, the issue here being that the radon is expected to emanate into the lungs at a particular rate, so it's a pretty good rate per day that's directly based on the radium body burden. And the volume or the rate at which the person is breathing at the time of sample, and he breathes out the dust sample would dictate what would affect what the concentration is.

DR. MAURO: That was a concern, yes.

MR. HINNEFELD: ^ is measured in a radon concentration in the exhaled air.

DR. ZIEMER: Well, just an observation, this is a typical sort of a bioassay procedure. It's not done during the middle of a work cycle. You don't jump in and take a breath sample while a person is doing heavy work. They go to a lab somewhere. They're probably sitting down. Their actual breathing rate would be at the low end of things rather than at the high end. You know what I'm saying?

In other words they're going to have a sort of a moderate or low breathing rate because it's more like a resting condition just for sampling. And so if a higher breathing rate gives you an underestimate, but you're not really going to have that condition unless you take a person in the lab and put them on a treadmill and then take a sample or something.

DR. MAURO: Yeah, Paul, I would agree because I'm looking at the scorecard right now that was used in our main report, and it got all fives across the board. And the reason it made it into the matrix is that in converting this write up into the matrix, one of the observations was almost like a caution.

But quite frankly, I accept the argument that, listen, this is going to be, if they're doing radon breath analysis, they are following standard protocol which clearly they are because Mike Thorne did review the protocol. There's no reason to believe they're going to deviate and do something foolish. I mean, I'm prepared to accept that as being a reasoned argument, and that using the standard default value of 20 liters per minute is probably a reasonable way to deal with this problem. So I, for one, feel that -- Mike Thorne isn't on the line. He's in Great Britain, but he gave it all fives, so I'm okay.

MS. MUNN: Particularly in light of the small number of claimants this is likely to affect.

DR. MAURO: Yeah.

DR. ZIEMER: But I think aside from that, it has to be the right decision regardless of the number of claimants. And I think you could argue that you'd have to have an artificial construct and get a high breathing rate on a lab sample.

MR. HINNEFELD: Yeah, I think in point of fact the breathing rate in a lab could quite likely be lower than 20 liters per minute for this using 20 liters --

DR. ZIEMER: Yes, you would overestimate.

MR. HINNEFELD: Overestimate the burden.

DR. ZIEMER: Yeah.

DR. MAURO: Maybe for the purpose of, I mean, let us say mechanistically we're dealing with this. I think that the explanation -- see, right now the explanation is pretty short. It says -- if you look in the matrix in red -- it says the default ICRP breathing rate of 20 liters per minute is used for all intake assessments. Now a little bit more explanation of the kind that we're talking about --

DR. ZIEMER: In other words, why would you use that?

DR. MAURO: Yeah. And why we're okay --

DR. ZIEMER: This is reasonable for a person undergoing a laboratory bioassay.

DR. MAURO: And perhaps conservative.

MR. HINNEFELD: Right.

DR. MAURO: Yeah, I think that would put

this one to bed.

MS. BEHLING: The only other thing I'll mention is this is going to be an issue at the Fernald site, and so there will be possibly a lot of people that this may impact, but it's being looked at very closely also. So when it does become an issue that is being used especially for like I said the Fernald and under the SEC I think this is one of the issues. It's being looked at in close detail as to the approach that was taken and so on so it's really being covered in that aspect of things at the site profile level or the SEC level.

DR. ANIGSTEIN: This is Bob Anigstein. Going back to the discussion of the breathing rate for different activities, I just looked up. The ICRP 1.2 cubic meters per hour is strictly for light activity.

MR. HINNEFELD: Well, it's called light activity in the ICRP, but the basis behind that though, the light activity number, is some portion of time at rest and some portion of time at more strenuous labor. There's another document underpinning that, that term

light activity. That's what they describe light activity as. And so for a breathing rate in a laboratory where they take somebody to the lab and have them breath aged air and --

DR. ANIGSTEIN: I wasn't referring to the radon exposure. I was referring to the previous discussion on this that we just finished.

MR. HINNEFELD: Okay.

MS. MUNN: So can the action item be that NIOSH will augment its report to clarify the point --

DR. ZIEMER: Probably just need a couple more sentences.

MR. HINNEFELD: A couple more sentences is what I would expect.

MS. MUNN: All right.

Page 34, PROC 0067-01.

DR. MAURO: I'm sorry, Wanda, could you help me out a bit? I'm following the matrix, and I just lost track here. Where are we? What OTIB?

MS. MUNN: We're on PROC 0067-01.

DR. MAURO: PROC 0067.

MS. MUNN: We didn't have any new NIOSH responses prior to that.

MS. BEHLING: Page 34, John.

DR. MAURO: Okay, thank you. Thank you. Let me get myself oriented a bit.

DR. ZIEMER: It looks like NIOSH has agreed to apply, to add a flowchart to the next revision. Is that how you interpret this?

DR. MAURO: Oh, okay, I'm getting myself oriented. I think we're into all of the QA procedures now.

MR. HINNEFELD: Right.

DR. MAURO: We've sort of left the technical procedures.

MS. MUNN: We have.

DR. MAURO: Okay, good, good, that helps me. And unfortunately, the author of our review I don't believe is on the line, Steve Ostrow, but I am familiar with a lot of the --

DR. ZIEMER: Well, this is pretty straightforward.

DR. MAURO: Yeah, yeah.

DR. ZIEMER: The finding was to provide a flowchart to help the users, I guess.

DR. MAURO: In fact, not only that, I think

when you go over all of, a large number of the reviews of the procedures, the comments, they all have to do with context, like the concept of a flowchart in terms of, okay, you have a comprehensive quality assurance program which is made up of a whole array of procedures, I think a recurring theme is it's difficult to see where any one procedure fits into the matrix of procedures or the flowchart.

DR. ZIEMER: The big picture.

DR. MAURO: The big picture. If the big picture was communicated and then every one of the individual procedures is sort of part of the puzzle, that would really help us judge the completeness of the program and the role of any given procedure within the program. So the flowchart issue I think goes toward an awful lot of the comments that we're going to be going over here.

DR. OSTROW: Hey, John, this is Steve Ostrow.

DR. MAURO: Oh good, Steve, great. I'm so glad you're able to join us.

DR. OSTROW: I'm awake, too, after all this stuff. That's my general comment, too. It's

a little bit difficult reviewing some of these procedures, QA-type procedures. Unless you have an overview of the entire system, it's hard to see how each one fits in. Each procedure would benefit very much from maybe one standard page that shows a diagram of the hierarchy of procedures starting out with the QA procedure on the top and where all these little, smaller procedures fit in.

DR. ZIEMER: Again, it appears that NIOSH concurs with that idea and is indicating they'll consider that in a future revision. Is that correct?

MR. HINNEFELD: Well, we will, yeah. We agree that considering a flowchart. Now what Steve just talked about which is, and John, which is context and how the various documents relate, I'm not 100 percent familiar with these documents, but it would seem that if the Quality Assurance program was ^ I believe that was reviewed, wasn't it?

DR. OSTROW: Yes, it was.

MR. HINNEFELD: Was it?

DR. OSTROW: Uh-huh.

MR. HINNEFELD: So then this same finding

would be there then apparently. Because to me that would be the place where the context should be set.

DR. OSTROW: Well, I think you could have one standard page in each one of these implementing procedures that show how it fits into the overall picture.

DR. ZIEMER: You mean the same flowchart?

MR. HINNEFELD: Same flowchart?

DR. OSTROW: It could be the same flowchart just with a different box highlighted in each procedure just to show the individual procedure. And that's all I envision it. I mean, there are probably other ways to do it, too. It would just be the same page for every single procedure, same diagram.

MS. MUNN: NIOSH and SC&A need to discuss this and perhaps put a straw man out to ^ work about being unduly burdensome for both the agency and the contractors. Is it possible to do that?

DR. ZIEMER: Well, the other way of looking at it, NIOSH says they'll consider this in their future revisions, and they may need to take a look at, I could see a flowchart that

was so complex it wouldn't be helpful. There are a lot of procedures, so it may be that you would highlight certain ones or groups of -- I don't know. I think you'd have to take a look at the total picture.

DR. MAURO: In a way, Paul, this sort of is not unlike the conversation we had earlier about the suite of technical procedures, how they're all interconnected, interlocked and interdependent. The red write up that starts on page 34 of the matrix --

DR. ZIEMER: Yeah, that's what we're looking at.

DR. MAURO: Right, I was just reading it again, you know, just to refresh my memory. In effect what that write up is doing is it explains, yeah, there is this very --

DR. ZIEMER: Hierarchy of --

DR. MAURO: -- you know, now the question becomes do you need to, every time you write a particular procedure, it certainly would be helpful to understand the context. The question becomes is that something that is necessary to do for each procedure if, in fact, all of the dose reconstruction folks are

fully apprised and trained in the overall program, Quality Management program, and understand where that particular procedure fits in.

MR. ELLIOTT: This is Larry Elliott. We've said we'd consider this in our efforts to revise in the future. So, you know, I hear this as a constructive comment. We're going to take it to heart, and I don't see it necessary for this working group to belabor the point.

DR. ZIEMER: Yeah, I don't think we need to solve the issue here. I think it's been raised, maybe need to consider how it could be done in an efficient way that would be helpful to the constructors.

MR. HINNEFELD: My one smart aleck comment here, of course, is we don't like it to be easy for reviewers. It serves a purpose of the Quality Assurance folks and whoever else uses them on the ORAU side because the ORAU procedures would generally be used by the ORAU staff. If it serves their purposes, then I think that's the test. But that's not to say that an outside reviewer can't add value in

making comments like this.

I don't want to just shut it down, but I think we all want to bear in mind before we go too far now what's the appropriate path here is to make sure that the Quality staff that reads, you know, reads these with an open mind and says, okay now, realistically, what will be helpful to us and helpful to potential new hires. We don't have very many new hires anymore, but potential new hires for attrition and things like that.

DR. ZIEMER: And if it's not helpful to them, then you don't want to spend a whole lot of time on it.

MR. HINNEFELD: Yeah, right.

MS. MUNN: Will you use the ^ which is what I suggested that ^ at least some kind of a straw man to see how complex or how simple such a chart would be to evaluate whether --

DR. ZIEMER: Well, I think Stu has suggested that it needs to be designed for the needs of the users, not the needs of the reviewers. So probably it should be approached by the NIOSH end of things I would think.

MR. ELLIOTT: Yeah, isn't it enough that we

hear this comment and we've accepted it? We're going to give it due consideration and if the working group wants to add weight to this, you could advance it as a recommendation for the full Board to pass on to us. But at this point I think it's really something that we have to take up here and evaluate in the scheme of things, and in a broader context, we have a request for proposals and a new contract award coming up. We have to look at it in that light. We have to look at it where things currently stand with the development of all of the technical tools as well as the quality control and quality assurance procedures that we want to employ as we move forward. So I really think it's on us at NIOSH to take this to heart and to look at what merit it brings.

MS. MUNN: I have no problem with that. The question is can we therefore close this item with that discussion in mind?

DR. ZIEMER: I think we can close it. They've made the commitment.

MS. MUNN: Is that acceptable?

DR. ZIEMER: Obviously there has to be a

follow up. Is this one of those things that is --

MS. BEHLING: In abeyance.

MS. MUNN: Well, I don't know. My question then becomes in abeyance as of when or because of what? NIOSH has said they will consider this, and we have to work on the premise that it would be considered an applicable tool only in cases where it would be applicable. Otherwise, how can we hold something in abeyance until we have made a judgment that this is an appropriate tool to apply?

MR. HINNEFELD: This is Stu Hinnefeld, and this is a thought. I don't want to sound cavalier about Quality Assurance here so I'm going to try to be careful about what I say. But the majority of the documents that have been reviewed are technical documents that provide technical basis for the manner in which a dose reconstruction is done correctly, i.e., in accordance with the program direction. So that's a scientific or technical review of is this process being done scientifically correctly.

Quality Assurance set of procedures

which describes doing them in accordance with the rules, the work group may want to decide that that's not a place they want to go, or they may want to decide that Quality may be a place they want to go. But I'm not so sure looking at the Quality procedures we'll get very far on that. It may be product quality or something else. I don't know how to do that. But I just think that the Quality procedures may have not very fertile ground for meaningful assistance to the program by going through these and worrying too much about these.

DR. MAURO: This is John. I also have an observation. I and Steve and others have prepared and have reviewed Quality Assurance procedures on many occasions in many different contexts. And usually the procedures are very complete, and that is they make a commitment to quality. What I find is the degree to which those procedures are, in fact, implemented.

In other words, this is just my own perspective. The added value comes from determining the degree to which that any

organization is, in fact, following its procedures. That becomes more important than whether or not the procedures themselves seem to be reasonable and complete. So, I mean, I don't know if that helps any.

Basically, what Steve found in reviewing all your procedures is that by and large you've got yourself a comprehensive program except that it's difficult to follow piece by piece without having a roadmap. And it sounds like you folks are certainly prepared to try to consider that. My observations regarding the Board's role and our role in supporting the Board is the degree to which there is any value to actually auditing the degree to which the procedures are being followed.

Now I may be overstepping my bounds, but that's where value is added. But that also, of course, is incorporated into their own procedures. For example, they have an internal auditing, they have a set of procedures and way to audit that the procedures are being followed. The degree to which the Board wants to weigh in there is

certainly the purview of the Board.

So forgive me if I sort of stepped outside, but I've been involved in a lot of QA kind of activities in the nuclear power industry so I'm pretty familiar with the process, and I just wanted to pass that on.

MS. MUNN: Well, can we find this response to be acceptable and close this item or not?

DR. MAURO: Steve, from SC&A's perspective how do you come out on that looking at the picture collectively?

DR. OSTROW: Well, I think so. I think we could close it out. Just rely on NIOSH to include a roadmap if they feel it's beneficial to their own reviewers, to their own use of the procedures. This is a suggestion, not a fault, that was found.

MS. MUNN: I think this is acceptable-closed.

MS. BEHLING: So am I.

MS. MUNN: Item two.

MR. ELLIOTT: Thank you, Steve. This is Larry Elliott. I appreciate you offering that as a suggestion. It certainly is important to me, and we will fully look at it.

DR. OSTROW: This wasn't a criticism of the procedures. It was just a suggestion to how to improve the use of them.

MR. ELLIOTT: That's the way I was taking it, too. Thank you.

DR. ZIEMER: I think the next one is sort of in the same boat, discuss how the procedures fit into the overall Quality Assurance program. That looks like another one that's sort of intended to help the outsiders understand it, but --

DR. OSTROW: There's a number of similar type comments.

DR. ZIEMER: So does it actually affect the -- yeah.

DR. MAURO: I'm looking through all of the remaining SC&A comments right on through, I guess, the last comment that's on page 42, and they all basically are the same comment.

DR. ZIEMER: Right.

MS. MUNN: Pretty much, and the response is primarily we'll consider that if it's necessary. Is there any objection to marking all of these acceptable and closed?

DR. OSTROW: This is Steve. I don't object

to that.

DR. ZIEMER: A lot of these, they're understood as suggestions and will be considered in the future revisions of --

MR. ELLIOTT: Stu, I think we're okay with that, aren't we?

(no response)

MR. ELLIOTT: Stu, are you still there?

MR. HINNEFELD: Hi, I muted myself because my phone beeped awhile ago. Yes, that's acceptable to me.

MS. MUNN: All right, then the last one of those is on 42 of page 42 of 42.

Very good. We managed to make it through the second matrix. Amazing.

DR. ZIEMER: Very good.

MS. MUNN: But we still have open items, but at least we've gotten through it once. That's great.

Now, we had expected for us to have a 15-minute break about now. Probably a good time to do it. We don't have a great deal left in front of us, that I am aware of.

DR. ZIEMER: I don't show a 15-minute break for another hour yet.

MS. MUNN: What?

DR. ZIEMER: You have a 15-minute break at 3:30, but it's only 2:30.

MS. MUNN: Well, yes but then we've been at it for an hour and a half. If you don't want to do it, we'll just go right on.

DR. ZIEMER: What do we have left?

DISCUSSION OF THIRD SET

MS. MUNN: What we have left is I want to just have a brief discussion, and I know it'll be brief because nobody's had an opportunity to really and truly absorb it, on the information we just received from SC&A, a 291-page document that's been received. And I doubt, I know I haven't had any opportunity to do more than just scan it very quickly.

DR. ZIEMER: I don't think I've gotten that one. When was it sent out?

MS. MUNN: It's brand new. I think it was yesterday.

MR. HINNEFELD: October 30th. You talking about the third set?

MS. MUNN: The third set.

MR. HINNEFELD: The one prior to Privacy Act review was sent on October 30th.

MS. MUNN: The one that -- here it is. I'm trying to get back to the first page so that I can see it. It's October 2007, October 29 effective date, draft, 291 pages. NIOSH/ORAUT methods used for dose reconstruction, review of the third set of procedures. Forty-five procedure reviews covered. It's very extensive.

Kathy, is it your expectation that this will appear on the --

MS. BEHLING: I'm hoping to get that on to the new matrix, yes.

MS. MUNN: There's a lot there.

MS. BEHLING: Yes, I know. In fact, let me ask this. Since there is a lot there I would assume that the priority should be for me to try to get the third set findings into the matrix format that we currently, or that we're going to be using, the new matrix format. And then if I can't get everything done, hopefully, that will certainly be done by the 11th of December. And if not everything gets done, it might be just the first set put into this format. Is that acceptable?

MS. MUNN: I would think so. There are only

so many hours in a day, and this third set document appears to be extensive, so I think your approach is quite acceptable.

MS. BEHLING: Okay, so I will take this second set, and we will reformat using just the minor changes that I made to John's initial matrix. I will then look at the third set to develop a matrix for the third set, and then as the last item go back to the first set and put that into this format. But the other thing I will have done by then is the roll up. I should be able to put everything into a roll up report. It's just that the first set, the individual sheets I may not have done.

MS. MUNN: The roll up is really key to being able to see what we have and what we have yet in front of us. So, yes, your approach is fine with me.

Any comments, one way or the other, from other members of the Board?

DR. ZIEMER: It sounds fine.

DR. MAURO: And, Wanda, this is John. Just a point to let everyone know. This should be an interesting set because what we've done here is beside the original 30 that we were

asked to review, during the course, while we were working that as you probably recall, we were reviewing a lot of new OTIBs that were coming out as part of the various site profile reviews that we were engaged in, especially Rocky, that really did not have a home.

In other words, the formal review and documentation of a lot of the site specifics were captured here. So what we're going to have is something a little, we're going to deal with something a little different than we've dealt with and that includes not only the standard set of 30 that are, approximately 30, that were originally authorized, but we also included a number of other reviews that were done in another venue, namely as part of the review of some of the closeout process where SEC and site profile issues. So we're going to see not only generic, but we're going to see some site-specific because we felt it was necessary to have a home for those site-specific reviews.

MS. MUNN: That appears to be the best way to capture them, John. I don't know where else would they go.

DR. MAURO: Yeah. That's why this is such a large document.

MS. MUNN: Well, 45 is a lot, but we'll have to deal with it. So we'll do the best we can ^ as much of it as possible for December.

RECAP OF ACTION ITEMS

The other item that I have listed for us is to look at our calendars and make sure that we're squared away with what we need between now... I'm going to read you the action items that I have. Help me if I am off base. And, Chia-Chia, can you check your list against mine? If there are additions or subtractions, we can discuss that offline.

MS. CHANG: Yes, I think your list will probably be ^.

MS. MUNN: But let's see what we have here. I have action items:

SC&A will complete the roll up and tracking matrix in the new format ^ possible by December 11th.

NIOSH will report on where we are with global issues.

MS. CHANG: Yes.

MS. MUNN: We will continue responses to ^

reword OTIB-0018. ^ to be forwarded to us. Responses will be available before December 11th.

^ OTIB-0017 will incorporate PROC-0090 reforms^.

NIOSH will respond to SC&A's matrix PROC-0092. This response -- NIOSH will communicate with SC&A and will respond to issues raised in the OTIB-0012 white paper. Key issues will be captured on the matrix.

Carryover of OTIB-0017-06. This was not addressed.

^ of OTIB-0023, ^ issue paper on oronasal ^ to accommodate OTIB-0004-02.

NIOSH will augment their response to OTIB-000^.

Are there any items that I missed?

(no response)

MS. MUNN: Are you there, Chia-Chia?

DR. ZIEMER: We lose her?

MS. MUNN: We lost her.

DR. ZIEMER: Kathy, are you there yet?

MR. HINNEFELD: Yeah, I'm here.

DR. MAURO: I'm still here. It's John.

MS. BEHLING: This Kathy. I'm still here.

I don't have any other items. I'm sorry. I thought you were waiting on someone else.

MS. MUNN: I was. I was waiting for Chia-Chia.

MR. HINNEFELD: This is -- Wanda, the last action item you had, was that 25-1?

MS. MUNN: Yes.

MS. CHANG: I'm sorry. This is Chia-Chia. I was pushing the speaker phone button and hung up instead. I was pushing the mute button and pushed the speaker phone button instead and hung up.

That was it.

MS. MUNN: I will get this into final shape and get it out to you within the next few days. I'm anticipating that our face-to-face meeting in Cincinnati will start at 9:30 in the morning. ^ I hope so.

DR. ZIEMER: What date is that?

MS. MUNN: In the interim the work group members should please take time to review this document.

DR. ZIEMER: Are we still on December 11th?

MS. MUNN: We're still on December 11th.

DR. ZIEMER: Okay, just wanted to double

check.

MS. MUNN: 9:30 a.m. Hopefully, with any luck at all, at the Marriott.

Anything else for the good of the order?

DR. ZIEMER: Thank you, Wanda.

MS. MUNN: Thank you all. We appreciate your efforts. We'll see you in Cincinnati.

(Whereupon, the working group meeting was adjourned at 2:50 p.m.)

CERTIFICATE OF COURT REPORTER

STATE OF GEORGIA

COUNTY OF FULTON

I, Steven Ray Green, Certified Merit Court Reporter, do hereby certify that I reported the above and foregoing on the day of Nov. 7, 2007; and it is a true and accurate transcript of the testimony captioned herein.

I further certify that I am neither kin nor counsel to any of the parties herein, nor have any interest in the cause named herein.

WITNESS my hand and official seal this the 14th day of March, 2008.

_____

STEVEN RAY GREEN, CCR, CVR-CM

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